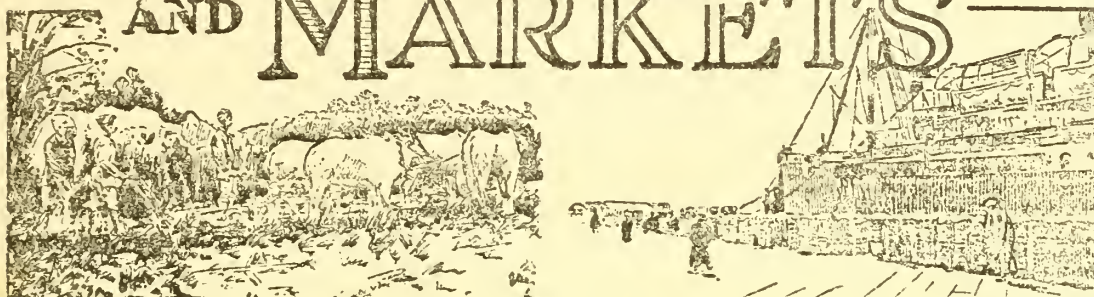


Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

FOREIGN CROPS AND MARKETS



ISSUED WEEKLY BY
THE FOREIGN AGRICULTURAL SERVICE
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

VOL. 32

MARCH 23, 1936

NO. 12

FEATURE ARTICLE

THE HOG INDUSTRY IN POLAND

Reprints

IN THIS ISSUE

	Page
India sows large wheat acreage.....	327
Oriental wheat and flour markets.....	327
Chinese stocks of raw cotton low.....	329
Danube Basin apple exports increased.....	331
United States exports of agricultural and industrial products.....	333
South African wheat surplus disposal measures.....	334

L A T E C A B L E S

- - - - -

Egypt area sown to wheat for 1936 harvest estimated at 1,453,000 as compared with 1935 area of 1,463,000 acres. (International Institute of Agriculture, Rome, March 16, 1936.)

Reports indicate new Chinese wheat crop may be delayed from 5 to 10 days due to prolonged cold weather. Moisture supply in most sections appears sufficient for early spring growth. (Assistant Agricultural Commissioner F. J. Rossiter, Shanghai, March 20, 1936.)

Egyptian cotton ginnings to end of February amounted to 1,594,000 bales of 478 pounds net, of which 163,000 bales of Sakellaridis variety, compared with 1,379,000 bales ginned to end of February 1935, of which 166,000 bales were of Sakellaridis variety. (International Institute of Agriculture, March 16, 1936.)

London wool sales active with continental buyers eager bidders. Compared with preceding week, both greasy and scoured merinos were 2.5 percent higher. Fine greasy crossbreds were 2.5 percent higher, medium and low greasy crossbreds on a par, and all scoured crossbreds 5 percent higher. Fine lamb's wool slipes were from par to 2.5 percent higher, all other slipes 2.5 percent higher. Russia, Austria, and Alsace buying Merinos; Yorkshire, Germany, the Netherlands, Austria, and France taking crossbreds; United States buyers quiet. (Agricultural Attaché C. C. Taylor, London, March 20, 1936.)

- - - - -

CORRECTION: On page 313 of the issue of March 16, the figure in the last line on the page should be 57,000 instead of 900,000

- - - - -

C R O P A N D M A R K E T P R O S P E C T S

- - - - -
BREAD GRAINSSummary of recent information

Farmers' intentions to plant spring wheat in the United States indicate an increase in the total spring acreage for harvest in 1936 of slightly more than 19 percent, according to the official report of March 16. With allowance made for about the usual abandonment of the seeded areas, the total for harvest this year is placed at 22,440,000 acres as compared with 18,826,000 acres in 1935, and the 5-year average, 1928-1932, of 20,431,000 acres. A 25-percent increase is expected in the durum area, the acreage for harvest in 1936 being estimated at 3,312,000 acres as compared with 2,644,000 acres harvested in 1935. Spring wheat other than durum is placed at 19,128,000 acres for 1936 as against 16,182,000 acres harvested in 1935. The acreage intentions as reported by the farmers have been adjusted and interpreted in accordance with conditions prevailing in past years, but no allowance was made for the effects of the soil conservation program.

The second estimate of the 1936 area sown to wheat in India was placed at 33,329,000 acres, according to a cable from the Director of Statistics at Calcutta. This indicates the usual gain of about 2 percent over the first estimate issued in January, which is based on incomplete returns, and compares with the second estimate for 1935 revised to 33,774,000 acres. The final estimate for last season amounted to 34,485,000 acres, and was second only to the record of 1934. The 1935 production exceeded the 1934 crop, however, by around 12,000,000 bushels and was next in size to the 1930 outturn of 390,843,000 bushels, which was the largest on record. The second estimate of the acreage sown in the Punjab, which represents about 33 percent of the total wheat area of India, was placed at 10,236,000 acres, an increase of 2.5 percent over the comparable estimate for 1935 but only about 250,000 acres under the final estimate of 10,483,000 acres. Should upward revisions take place during this season, as is generally the case, it is not unlikely that the 1936 acreage in the Punjab will be larger than that of 1935.

The oriental wheat marketsChina

Prices of flour remained steady on the Shanghai market during the week ended March 13, according to a radiogram from the Shanghai office of the Foreign Agricultural Service. Two cargoes of wheat were booked by Shanghai mills; one from Portugal at 91 cents per bushel for May delivery, and one small cargo of Australian wheat from Victoria at 95 cents per bushel

C R O P A N D M A R K E T P R O S P E C T S , C O N T ' D

for April delivery. If they can be purchased at about 94 cents per bushel, it is expected that a few more cargoes of foreign wheat will be booked during the next few weeks, especially if local flour prices advance. Arrivals of domestic wheat at Shanghai continue to be in small quantities. As a result of high prices and improved transportation, purchases by Tientsin mills were reported to have been made in the area northwest of Peiping. Flour stocks at both Shanghai and Tientsin were below normal for the season of the year.

Prices of wheat at Shanghai, duty and other landing charges included, were reported as follows: Australian from New South Wales for April delivery 97 cents per bushel, from Victoria 95 cents; Portuguese for May delivery 94 cents; domestic wheat for March delivery 85 cents. Domestic flour for March and April delivery was \$1.00 per bag of 49 pounds; Australian, c.i.f. Hong Kong, \$3.41 per barrel of 196 pounds. Tientsin flour statistics for February were reported as follows, with comparisons for February 1935 in parentheses: Arrivals from Shanghai 134,200 barrels (118,000), other Chinese ports 2,300 (0), total 136,500 barrels (139,000); production 110,000 (0), stocks at the end of the month 87,000 barrels (257,000).

Japan

Mill activity in Japan during February was below that of the corresponding month of 1935, according to information received from Consul General Garrels at Tokyo by the Shanghai office of the Foreign Agricultural Service. Export demand had declined and domestic demand showed no increase during the month. Wheat stocks were about normal for the time of year.

Wheat quotations at the mill on March 1, duty and landing charges included, were reported as follows: Western White No. 2, \$1.31 per bushel, Canadian No. 1, \$1.29, No. 3, \$1.24, Australian \$1.19, Manchurian \$1.24, Argentine \$1.36 per bushel. Domestic standard was \$1.06 and Portland wheat, c.i.f. Yokohama, \$0.96 per bushel, duty and landing charges excluded. The wholesale price of flour at the mill on March 1 was \$1.14 per bag of 49 pounds.

Wheat imports into Japan during January were as follows, with 1935 comparisons in parentheses: From Canada 31,000 bushels (291,000), Australia 876,000 (915,000), Manchuria 62,000 (0), Argentine 0 (68,000), others 0 (2,000), total 769,000 bushels (1,276,000). Exports of flour during the month amounted to 127,317 barrels as compared with 309,222 barrels exported in January 1935.

C R O P A N D M A R K E T P R O S P E C T S , C O N T ' D

F E E D G R A I N SSummary of recent information

The report of farmers' intentions to plant corn in the United States, as indicated on March 1, shows an anticipated area of 98,775,000 acres, an increase of 6.5 percent over the harvested acreage of 1935. The anticipated oats acreage is 39,785,000 acres and the barley acreage 13,017,000 acres, both of which differ little from the 1934 acreages. These intentions have been adjusted to show the acreages that would be harvested in 1936 if the relations between growers' intentions and harvested acreages are similar to those which have prevailed in the past. No allowance is made for the possible effects of the soil conservation program.

The first official estimate of the 1936 area sown to barley in Egypt is 284,000 acres, which is an increase of about 1 percent over the 1934 acreage, but is about 7 percent below the 1931-1935 average. The condition of the crop on March 1 was reported as slightly above average.

The 1935-36 barley production in the Union of South Africa is estimated at 1,699,000 bushels, which is one of the largest harvests on record. The oats crop is placed at 7,923,000 bushels, which is the largest harvest recorded for several years.

Stocks of barley in England and Wales as of January 1 were estimated at 9,987,000 bushels compared with 11,900,000 bushels a year earlier, while oats stocks were placed at 42,490,000 bushels compared with 41,370,000 bushels on January 1, 1935.

A table showing the 1936 barley and oats acreage in the countries so far reported, and tables giving current trade and price information are found on pages 361 and 362.

C O T T O NChinese stocks of raw cotton low

Stocks of all raw cotton in China are at low levels for this time of year and with small amounts of foreign cotton in stock and afloat, scarcity in foreign cotton may develop, according to information received from Agricultural Commissioner C. L. Dawson at Shanghai. Stocks in

CROP AND MARKET PROSPECTS, CONT'D

- - - - -

Shanghai public warehouses at the end of February 1936 amounted to only 167,000 bales (of 500 pounds) compared with 253,000 bales on the same date last year. This was caused chiefly by low stocks of American cotton which amounted to only 14,000 bales as against 81,000 bales at the end of February a year ago.

Chinese imports of foreign cotton during October 1935 through January 1936 were less than half the amount of such imports during the corresponding period last year, having amounted to 32,496 bales compared with 80,981 bales the year before. The January imports of foreign cotton were 10,983 bales as against 26,996 bales in December 1935. During the first 4 months of the current season (October-January) imports of American cotton made up a total of 19,064 bales as against 41,578 bales during the corresponding quarter last season. Imports of Indian cotton in the same period amounted to 4,261 bales against 23,796 bales last year, and of Egyptian to 8,890 bales compared with 14,402 bales the year before. The Shanghai office of the Foreign Agricultural Service estimates that the Chinese foreign cotton consumption during the season will amount to 150,000 bales of American, 150,000 bales of Indian and 20,000 bales from all other cotton-growing countries.

The recent advance in price of Chinese cotton was greater than that of Indian cotton. The widening of the margin between Indian and Chinese cotton resulted in the purchase of about 30,000 bales of Indian cotton. These purchases, however, are not sufficient to fill the demand for foreign cotton and it is expected that much more foreign cotton will be bought in April. Domestic cotton prices in China have advanced somewhat more than those of Indian or American as shown by the following figures.

COTTON: Price per pound at Shanghai,
February 13 and March 12, 1936

Kind	February 13, 1936	March 12, 1936
Domestic cotton (April delivery)	11.52	11.94
American Middling 7/8 (immediate delivery) ..	14.92	15.13
Indian Akola (immediate delivery)	11.42	11.58

The price parity between American and Indian cotton remained practically the same as during the preceding month, according to the March quotation. The increase in the price of cotton is attributed to limited foreign supplies and to the domestic crop which is 14 percent smaller than the larger crop of 1934.

CROP AND MARKET PROSPECTS, CONT'D

Following the general slump, Shanghai mills at present are operating more actively than a year ago. Total arrivals of cotton at consuming centers during the period October 1935 through February 1936 amounted to 598,099 bales as against 487,853 bales in the corresponding period of 1934-35. Arrivals of Chinese cotton constituted 552,135 and 408,735 bales of the respective totals. Because of the heavy demand upon the domestic crop and small stocks of readily available foreign cotton, many Chinese mills must either increase their imports substantially or curtail operations before the new crop is available.

January piece goods imports amounted to \$242,513 in comparison with \$600,518 in January 1935. January exports of piece goods were less than imports, amounting to \$238,505 as against \$216,966 in January 1935. See page 364 for imports, arrivals, and deliveries to mills.

FRUIT, VEGETABLES, AND NUTS

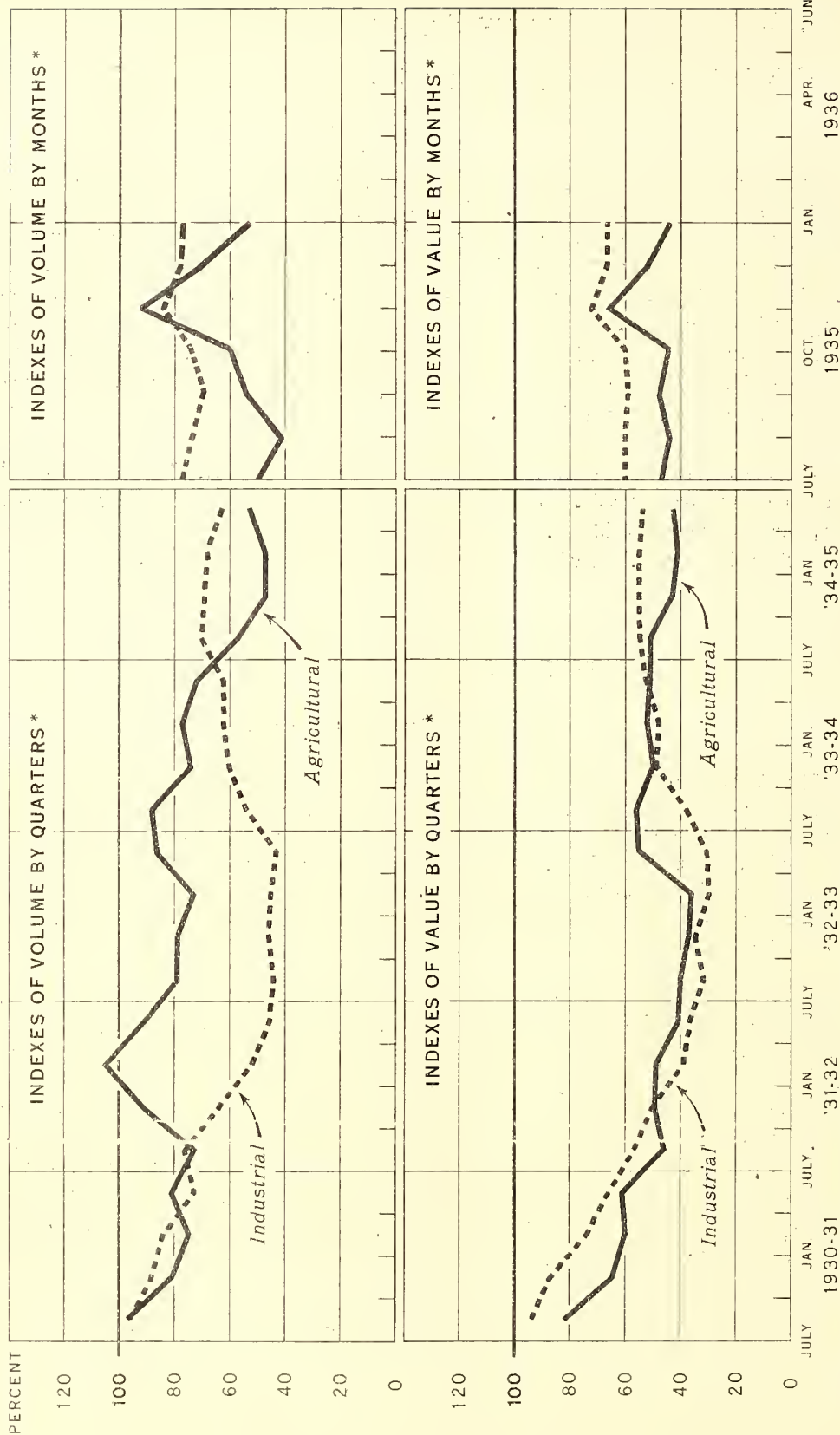
Danube Basin apple crop

The 1935 production of apples in the four Danube Basin countries has been placed at about 278,480 short tons, as compared with 281,411 tons produced in 1934 and 271,391 tons, the average production for the 5-year period 1929 to 1933, according to a report from the Belgrade office of the Foreign Agricultural Service. The quality of apples of the 1935 crop has been good, but they have run to somewhat small sizes, due to the drought which prevailed during the summer.

Exports of apples from the 1935 crop reached 50,426 short tons during the first half of the 1935-36 marketing year (July-June) as compared with only 20,431 tons exported during the same 6-month period (July-December) last year. Czechoslovakia has been the best market for Danube Basin apple surpluses during the 1935-36 season, followed by Germany. Both Austria and Italy reduced their purchases considerably this season. A new market has been gained by Rumania in Palestine. The table on page 363 gives the production of apples in the Danube Basin, by countries, for the years 1934 and 1935, together with a 5-year average for the years 1929 to 1933.

UNITED STATES: INDEXES OF EXPORTS OF AGRICULTURAL AND INDUSTRIAL PRODUCTS, QUARTERLY 1930-31-1934-35 AND MONTHLY 1935-36

10-YEAR AVERAGE (1923-32=100)



* SEASONAL FLUCTUATIONS ELIMINATED

4"INDUSTRIAL" INCLUDES ALL IMPORTANT NON-AGRICULTURAL PRODUCTS EXCEPT CRUDE PETROLEUM, PHOSPHATE ROCK, AND UNREFINED COPPER

UNITED STATES EXPORTS OF AGRICULTURAL AND INDUSTRIAL PRODUCTS

United States exports of agricultural and industrial products declined in both volume and value during January as compared with December. The index of volume of agricultural exports fell about 25 percent, from 71 percent of the 10-year average (1923-1932) to 53 percent of that average. The volume of industrial exports declined only slightly, from 78 to 77 percent of the 10-year average. The value of industrial exports fell from 66 to 62 percent of the average, while the value of agricultural exports fell from 52 to 44 percent.

UNITED STATES: Monthly indexes of agricultural and industrial exports, July to January 1935-36, adjusted for seasonal variations (1923-1932 average = 100)

Classification	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Volume indexes:							
Agricultural exports....	50	41	55	60	92	71	53
Industrial exports <u>a/</u> ..	77	74	70	74	84	78	77
Value indexes:							
Agricultural exports ...	47	44	47	45	66	52	44
Industrial exports <u>a/</u> ..	60	60	59	60	72	66	62

a/ Includes all important non-agricultural products except crude materials such as coal, crude petroleum, phosphate rock, and unrefined copper.

The principal decline took place in unmanufactured cotton, exports of which fell from \$57,000,000 in December to \$36,000,000 in January. The decrease in quantity was from 886,000 to 406,000 running bales. Decreased purchases by France, Germany, and Japan were the major causes for the decline. Although lower than for December, cotton exports in January were larger in both volume and value than was the case in January 1935.

The value of exports of all agricultural commodities except cotton was \$27,000,000 in January as compared with \$34,000,000 in December. This represents a decline of only 20 percent, compared with an actual value decline of 31 percent for total agricultural exports (including cotton). Exports of leaf tobacco declined heavily from \$14,000,000 in December to \$11,000,000 in January. This was due primarily to a drop in price since the quantity exported remained almost constant. Exports of fruits and nuts declined from \$10,000,000 to \$6,000,000. On the other hand, increases took place in the value of exports of some other products, including lard and furs.

- - - - -

SOUTH AFRICAN WHEAT SURPLUS DISPOSAL MEASURES

The 1935-36 wheat crop in the Union of South Africa amounted to an all-time record of 20,209,000 bushels, according to a cable from the International Institute of Agriculture in Rome. Last season's crop amounted to 15,343,000 bushels, while the average for the 4 years ended with 1933-34 was 11,513,000 bushels annually.

During the 10 years 1920-21 to 1929-30 the Union produced only 64 percent of its wheat requirements, the crop averaging 7,720,000 bushels and consumption 12,139,000 bushels annually. The remaining 36 percent was imported, mainly from Australia and Canada. Repeated warnings have been given by the South African Government as to the dangers of over-production. The farmers, however, have been reluctant to forego the possibility of assured profitable returns from wheat in view of the relatively low returns obtainable in recent years from such products as wool and corn.

Among the reasons for the rapid increase in South African wheat production in recent years is the fact that the farm price of wheat has been high in relation to prices of wool and corn, each of which competes with wheat as a farm enterprise in that country. Whereas wheat prices in South Africa declined relatively little during the agricultural depression, wool and corn prices declined greatly.

A second important factor in the increased wheat production of the Union has been the stabilization of domestic wheat prices at artificial levels by governmental action. Since 1930 the Union Government has maintained a special import duty on wheat equal to the difference between the landed cost of foreign wheat (including the ordinary duty) and 22s.6d. per bag of 200 pounds (\$1.66 per bushel). South African millers at the same time were protected against foreign competition of imported flour by the imposition of a special duty amounting to the difference between the landed cost of foreign flour (including the ordinary duty) and 18s.6d. (\$4.55) per 100 pounds. Moreover, no wheat or flour can be imported except under special government permit.

The South African wheat grower is not actually guaranteed 22s.6d. per bag (\$1.66 per bushel) for his wheat but since imported wheat cannot be sold for less than that figure the control over imports has served to maintain prices for the domestic product at high levels compared with the world market price and has been the main factor in the rapid expansion in production during the past 3 or 4 years.

Late in 1935 the Wheat Industry Control Act was adopted. As a measure of temporary assistance, effective November 1, 1935, growers were to be compensated for losses incurred in consequence of storing wheat. The fund to defray these losses is obtained by the imposition of a processing tax on wheat ground into flour. Such levies may not exceed 1s. per bag of 200 pounds (7.4 cents per bushel).

- - - - -

THE HOG INDUSTRY IN POLAND a/

Poland is one of the important hog and pork exporting countries of Europe and at times ranks second only to Denmark in this respect. With a population of about 33,500,000 and with hog numbers of approximately 7,000,000 in 1935, Poland is not necessarily a great surplus pork producing country, but an important position as an exporting country has been achieved by reason of the low consumption of pork per capita and the encouragement which the need for foreign exchange has given to exports.

The hog industry has been expanded and greatly improved during the last decade. Until 1933, much of the export trade had been developed along bacon lines for the purpose of supplying the British market. The reduction in bacon exports which followed the adoption of the British bacon quota necessitated increased efforts on the part of Poland to find export outlets in other countries. During the present period of reduced world supplies, Poland has been able to supply the deficit countries of continental Europe with increased quantities of pork products, accepting in payment the industrial and other goods of those countries. At present, practically all of Poland's trade with countries on the Continent is the result of special barter arrangements, and the ability of Poland to absorb the goods offered in payment is one of the greatest limiting factors to this type of trade.

A study of the Polish hog industry indicates that further expansion and improvement are possible, provided increased domestic and foreign outlets are made available. The present Government is pledged to an improvement in agricultural conditions, and in place of the former heavily subsidized export of grains, a new policy has been announced which provides for expansion in the livestock industry and the conversion of Polish produced grains and feedstuffs into livestock products. An improvement in the economic situation of Polish farmers, who represent about two-thirds of the population, would permit not only an increased domestic consumption of pork, but also increased exports through greater ability to absorb the industrial goods of European countries deficient in hogs.

Since both time and money will be required to bring about the necessary changes, the degree of success attained under the new policy remains to be seen. Of particular interest to American hog producers is the fact that the Polish hog industry is rather versatile, and Polish hogs, in general, are of a type more competitive with American hogs than are the hogs of most other European countries.

Polish agriculture

Poland is primarily an agricultural country and approximately two-thirds of the population obtain their living from farming and related vocations. In general, Polish agriculture is peasant in type, and

a/ By H. E. Reed, Agricultural Commissioner, stationed at Berlin, Germany. Based on studies conducted in Poland, December 1935.

THE HOG INDUSTRY IN POLAND, CONT'D

providing the peasant and his family with the necessities of life is the main objective. Farm holdings are small, over 95 percent of all farms being under 20 hectares (49.42 acres) in size. In 1921, the last year for which data are available, farms under 5 hectares (12.36 acres) in size made up 65 percent of the total holdings, although they occupied only 15 percent of the total area of Poland, and hardly 25 percent of the farm land. The small unit greatly handicaps the production of standardized products, and specialized production for market has not been developed except in certain limited areas. Despite this situation, however, Poland produces exportable surpluses of hogs, pork, rye, barley, and wheat. In 1934, hogs and pork accounted for 6.6 percent of the total value of Polish exports and were exceeded only by timber and coal.

Place of hogs in Polish agriculture

Most of the hogs in Poland are on small and middle-sized farms. Large estates tend more toward the production of horses in their livestock operations and, because of the country's inefficient marketing system and the uncertainty of profit in the Polish hog industry, the estates seem to have taken little interest in hog production. Consequently, the unit of hog production is small, with farms averaging 2 to 3 hogs each. Farmers on middle-sized farms keep most of the breeding herds and produce most of the feeders. They feed out such hogs as conditions justify and their feed supplies will permit and sell the remainder to the very small landowners, who keep few breeding hogs and depend on the middle-sized farms for their feeder supplies. Because of the financial situation of the small landowners, most feeder hog purchases are on a barter or "work trade" basis.

Poland as a surplus pork country

Poland cannot be regarded as a surplus pork producing country in the same sense as is Denmark, the latter being a country with a small population and relatively high hog numbers. Poland ranks low among European countries in numbers of hogs per 100 inhabitants and in numbers of hogs per square mile and exports are possible only because the per-capita consumption of pork is very low. While pork is the most important single meat in the Polish diet, accounting for about 60 percent of the total meat consumption, available statistics show the latter to be relatively low, the annual average amounting to only about 19 kilograms (about 42 pounds) per capita (see table page 358). Poultry, game, and fish, however, are plentiful in Poland and offset much of what otherwise appears to be, for an agricultural country, a surprisingly low meat diet. Meat consumption in the cities is higher than in the rural districts. Little meat is eaten by the farm population except during the summer months when it is customary to work from 12 to 15 hours daily in the fields. Beets, potatoes, and cabbage, with occasional poultry or game, are the principal foods of the peasant.

THE HOG INDUSTRY IN POLAND, CONT'D

Apart from custom and dietary preferences, low purchasing power of Polish peasants accounts for much of the low meat consumption which obtains in rural areas. The Polish peasants, except in the German area, have always had a low standard of living. The depression has left them in an impoverished condition, a/ and reduced consumption of home-slaughtered meat had resulted. When hogs are produced, they are usually sold in order to obtain cash. As the peasant's need for cash has caused him to sell rather than consume his hogs, so has Poland's need for foreign exchange been partly responsible for the relatively large pork exports in the face of a low ratio of hogs per 100 inhabitants. Exports of pork products have been encouraged by subsidies.

Hog numbers, trends, and hog-feed relationships

Stocks of hogs in the area comprising present-day Poland were greatly reduced during the war, hostilities having lasted about 2 years longer in Poland than elsewhere. After peace had been established, many refugees returned, farming operations were generally resumed, and hog numbers gradually increased, a record high of 7,320,000 being reached in 1931. Since 1932, annual numbers have fluctuated between 5,800,000 and 7,000,000.

POLAND: Numbers of hogs, 1927, and 1929-1935

Date	Under 6 months	6 to 10 months	10 months and over	Total
	Number	Number	Number	Number
Nov. 30, 1927.....	3,525,574	1,360,927	1,442,894	6,329,395
June 30, 1929.....	2,300,224	1,185,472	1,342,945	4,828,641
June 30, 1930.....	3,155,641	1,380,471	1,511,138	6,047,250
June 30, 1931.....	3,754,247	1,784,643	1,782,008	7,320,898
June 30, 1932.....	2,782,669	1,461,883	1,599,102	5,843,654
June 30, 1933.....	2,378,633	1,364,862	1,404,635	5,148,130
June 30, 1934.....	3,766,968	1,637,682	1,685,873	7,090,523
June 30, 1935.....	3,480,000	1,571,000	1,652,000	6,703,000

Future trends in hog numbers in Poland are not clear. Greatly increased numbers would not be consistent with present agricultural economy.

a/ In a statement made while presenting his budget in December 1935, the Polish Minister of Finance said that the average cash income per peasant in 1934-35 was 11 grosze (about 2 cents) per day and that agriculture, while representing 70 percent of the people, was able to carry only 15 percent of the budget. These income data check with studies made in the American Consulate General, Warsaw.

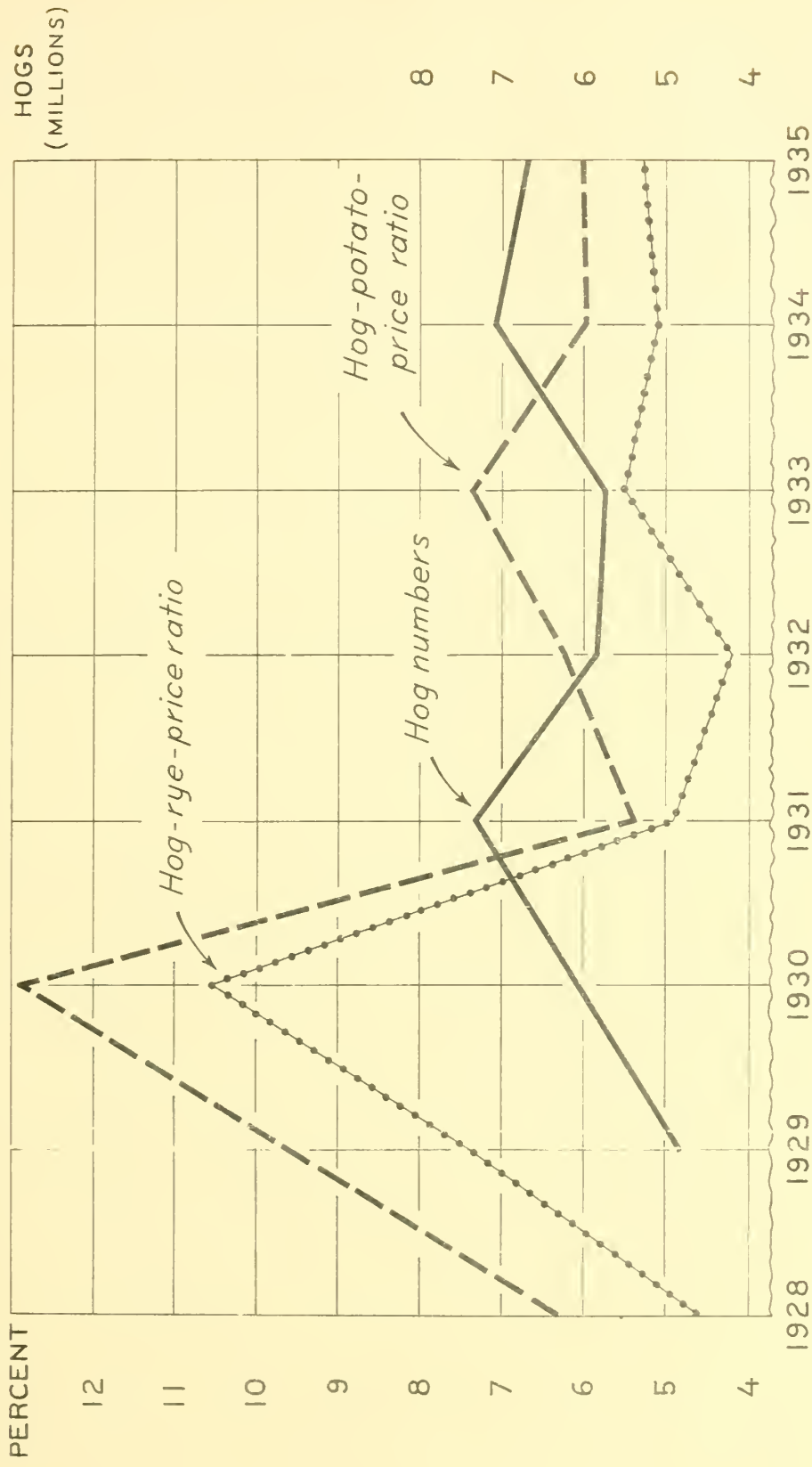
THE HOG INDUSTRY IN POLAND, CONT'D

Should the Government adhere to and be successful in materializing present plans for converting grains and feed crops into more valuable products through livestock and thereby improve the general situation in agriculture, however, hog numbers might be expected to show an increase. A moderate increase could take place with hog production largely in the hands of small and middle-sized farmers, but a marked increase would probably come only through commercialized production. This could take place on large estates or in commercial feed lots. In either case, the increase probably would be slow.

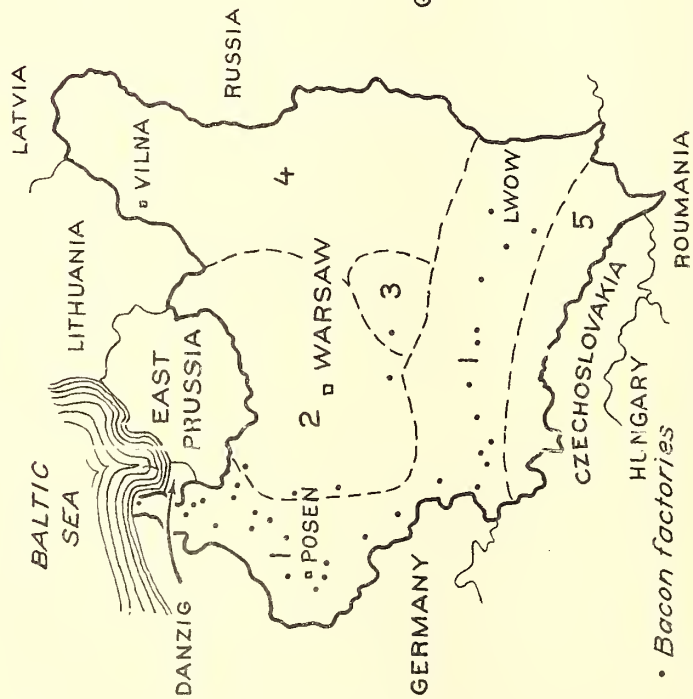
Government officials and others in Poland maintain that hog production operates in a cycle of 2 1/2 to 3 years' duration. This cyclical trend is not clearly in evidence from Polish hog-census data, but in this connection it should be pointed out that annual censuses are not satisfactory for showing cyclical trends in hog production in countries where bacon-hog production is an important part of total hog production. Furthermore, many contacts in Poland question the accuracy of the census data.

Despite the possibility that the census data may be inaccurate and not comparable, the fluctuations which occur in annual hog numbers appear to be largely due to hog-feed price relationships. Hog production is not entirely dependent on any one feed crop or phase of agriculture, although it is more closely related to potatoes than to any other single feed crop. Potatoes are the most important and widely used hog feed in Poland; rye, the principal grain used in hog feeding, ranks second. The connection between hogs and potatoes has become closer as bacon-hog production has developed, and the knowledge that satisfactory bacon hogs can be produced on a ration composed largely of potatoes has become more general. The relationship is fairly well shown by the fact that from 1928 to 1935, with the exception of 1933, hog numbers increased or decreased with rises and falls in the hog-potato price ratio when a time lag of one year is considered. Fluctuations in the hog-rye price ratio were, except in 1932, similar to those of the hog-potato price ratio. The drop in the hog-rye price ratio in 1932 partially explains the failure of hog numbers to respond in 1933 to the moderate increase in the hog-potato price ratio for 1932.

The chart on the opposite page illustrates the indicated relation between Polish hog-feed price ratios and hog numbers. Following the unusually high hog-feed ratios attained in 1930, hog numbers reached the record figures reported as of June 30, 1931. Thereafter, declining hog prices were largely responsible for unfavorable hog-feed ratios lasting, in the case of rye, until late 1931. Hog numbers declined from late 1930 to late 1933. Meanwhile, the ratios had started upward again in 1931, the movement lasting until late in 1932. The accompanying upward movement in hog numbers lasted from late 1932 to about a year thereafter. Since early 1934 the hog-feed ratios have been fairly steady but hog numbers have shown a downward tendency.

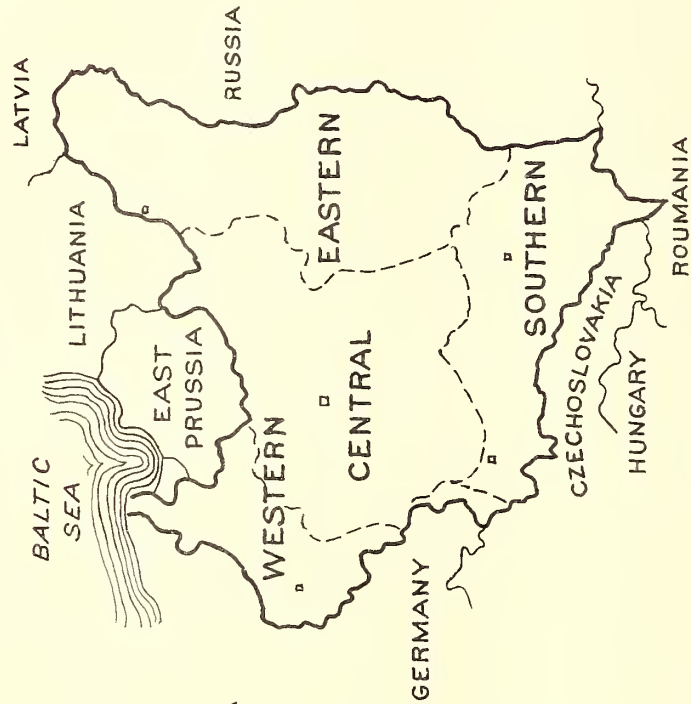


(A)



HOG-TYPE SECTIONS AND BACON
FACTORY LOCATIONS

(B)



HOG NUMBER
DISTRICTS

THE HOG INDUSTRY IN POLAND, CONT'D

Increases or decreases in hog production which follow rises or falls in the hog-feed price ratio are probably the result of increased or decreased breeding operations of the middle-sized farmers. The latter are in much better position than the small farmers to recognize price relationships and take advantage of them, and their feed supplies are of such quality and quantity that they can be marketed to advantage other than through hogs when hog feeding is unprofitable. It is reasonable to assume that the feeding operations on the very small farms have been affected only to a small extent by rises and falls in the hog-feed price ratio. Hogs are said to be the principal source of cash income of the small landowners; consequently, feeding operations appear to be limited only by their feed supplies, which generally are not produced in sufficient quantity to be marketed profitably, or at all, and which, if not fed to hogs, would be wasted.

Types, breeds, and distribution

Prior to the war, that section of present-day Poland which was a part of Germany was engaged in the production of a meat-type hog for local consumption and shipment to other German centers. The section which was a part of the old Austrian Empire was not important in hog production. Such hogs as were produced were of a fatter type than those in the German area, and the exportable surplus, which was never large, found a market in the industrial centers of Austria. That section which was under Russian rule produced some hogs of a more or less improved fat type but mostly hogs of a rather wild type, which were scavengers and subsisted almost entirely on what could be found in the forests. Both were consumed locally and very few were shipped any great distance. Consequently Polish hogs may still be classified as of three types, bacon, meat, and fat. Bacon hogs are estimated to account for about 45 to 50 percent of all hogs in Poland; unimproved hogs of a wild type, 10 percent, and meat- and fat-type hogs, 40 to 45 percent. Not all Polish hogs, of course, belong to these distinct types, since they show all of the intermediate variations which are to be expected from promiscuous crossing.

Distribution of hogs by types has been determined by proximity to available markets. At present, so far as hog types and production are concerned, Poland can be divided into four parts. The divisions according to type are not distinct, each division being based on the majority rather than on all of the hogs in each section. The divisions are shown in map A on the opposite page.

THE HOG INDUSTRY IN POLAND, CONT'D

Section 1. - The greatest improvement in hog type and development in hog production since the war has taken place in the former German area and southern Poland. After the war, difficulties with Germany closed the outlets formerly enjoyed by western Poland for hogs and pork, and hog producers, using the German Edelschweine and Veredelte Landschweine as foundation stock, began the production of bacon hogs for the British market. The movement spread and extended into central and southern Poland. Available foundation stock and proximity to the ports permitted the bacon-hog industry to develop in western Poland, but the development and expansion of the industry in central and southern Poland has been largely influenced by the location of railways, the bacon factories having been located along the lines of the main routes.

Many Large Whites have been imported from England, and marked improvement in bacon type has taken place in the bacon-hog sections. The inability of the processors to take all the bacon hogs which can be produced, however, has prompted many far-sighted producers to select an intermediate type of brood sow, one which, when crossed with a bacon-type boar, would produce acceptable bacon hogs, or, when crossed with a thick meat-type boar, would produce hogs which could be fed to heavy weights and meet domestic demand more satisfactorily than could strictly bacon-type hogs. Animal husbandry experts at Posen University, practical men who recognize the farmers' problem, recommend such a procedure, but in some other sections it appears that efforts are being directed solely toward perfecting the bacon type. Bacon hogs are marketed at a live weight of 190 to 210 pounds but the "two-way" meat and fat hogs from this section are marketed at much heavier weights.

Section 2. - In an area immediately surrounding Warsaw and extending north to the East Prussian border, hog production is directed largely toward the production of a fat meat-type hog, weighing from 350 to 400 pounds live weight, for local and Warsaw consumption and shipment to the deficit pork area in the industrial section of southwest Poland. Near the East Prussian border where the hog type has come under German influence, there are many hogs similar in type to the Veredelte Landschwein. Over most of this section, however, the hogs are of a Large White-native hog cross, somewhat thicker and fatter than the Veredelte Landschwein. A few Middle Whites and their crosses are also found in this section.

Section 3. - In a rather small and limited area southeast of Warsaw, a native Polish hog, known as the Golebska, predominates. The Golebska had its origin in a community near the village of the same name, where peasants crossed native hogs with pure-bred Berkshires, the latter having been introduced into that area by large estate owners prior to the war. Some Tamworth and Middle White blood was also involved. No studied or scientific attempt at breed development was made, but after years of promiscuous breeding and crossing it was noted that the black-and-white spotted hogs in that community were rather uniform, very hardy, good feeders, and of a thick, fleshy, early maturing type which satisfactorily met the demands of the Warsaw and local markets. The sows were good mothers, and the pigs

THE HOG INDUSTRY IN POLAND, CONT'D

possessed a rustling ability which permitted them to develop on grass and waste feeds until they attained a weight of 110 pounds or more, after which they fattened rapidly when placed on a potato ration. Live weights of 450 pounds and over are not uncommon for the Golebska.

National pride in having a Polish breed of hogs and a desire to retain and perfect the desirable characteristics of the Golebska are responsible for the interest which has been taken in the breed by the Government. At the Experiment Station near Pulawy, which is connected with the Agricultural Institute and aided by federal funds, one of the leading animal-breeding authorities of Poland is selecting, breeding, and developing Golebska hogs with the idea of perfecting the breed. The characteristics are not yet fixed and it is still necessary occasionally to introduce Berkshire blood. Selected hogs from the station's surplus stock are sold to farmers who do not live in the vicinity of bacon factories, there being no desire to introduce other than bacon hogs in such areas.

Golebska hogs are not numerous nor are they important in total Polish hog production at present. The breed is not recognized as a pure breed as yet, but it is being promoted by the Government in a modest and very sensible way, and after the desirable characteristics are more definitely fixed than at present, it is probable that the Golebska will play an important part in Polish hog production. Throughout the relatively small section where the Golebska is to be found, the objective is the production of a fat hog weighing from 395 to 440 pounds. Feeders are purchased at weights running from 110 to 220 pounds, attained on grass and waste feeds.

Section 4. - In the eastern part of Poland, lack of markets, poor transportation, and the absence of a satisfactory marketing system have offered little encouragement for the improvement of hogs. Improved hogs, mostly Large Whites, are to be found in scattered communities, and the largest hog farm in Poland, producing about 1,200 bacon hogs annually, is located near Vilna. In general, however, the hogs in eastern Poland are more or less unimproved, and many are of a wild type which has been indigenous to that section since long before the war. Most of the latter are of a short-bodied but late-maturing type, hard muscled, and hardy, and are handled as scavengers. When fattened after attaining an age of 1 1/2 to 2 years or more, they reach weights of 350 to 395 pounds. There is little or no striation of fat in the muscle fibres of such hogs, the fat being deposited almost entirely on the back. A 440-pound fat hog of this type frequently has a layer of back fat 3.5 to 4.5 inches in thickness.

The section indicated as 5 is a mountainous area, where hog feeds and hogs are not produced.

THE HOG INDUSTRY IN POLAND, CONT'D

With the exception of the southern voivodships, which include considerable mountainous and unproductive land and where over half of the farms in 1921 were under 5 acres in size, the numerical distribution of hogs in Poland seems to be related to the number of farms, size of farms, feed production, or available markets. The central voivodships, which include Warsaw and several other population centers, have the largest area, the most farms, the largest feed production, and the most hogs. In the western voivodships, proximity to the ports, the development of a bacon-hog industry, larger farms, and the productivity of the land account for the relatively high percentages of total hogs and low percentage of total number of farms. In the east, lack of markets and poor transportation facilities have kept hog numbers low in relation to possible feed production.

POLAND: Numerical distribution of hogs, 1934

District	1934 number of hogs	Per- cent of total	1921 number of farms	Per- cent of total	1935 popula- tion	Per- cent of total	1934 potato produc- tion	Per- cent of total	1934 rye produc- tion	Per- cent of total
	1,000	Per- cent	1,000	Per- cent	1,000	Per- cent	Mill. pounds	Per- cent	Mill. pounds	Per- cent
Central	2,893	40.8	1,224	37.5	14.0	41.9	35,296	47.8	7,562	53.1
Eastern	1,336	19.5	585	17.9	5.8	17.4	12,566	17.0	2,844	20.0
Western	1,670	23.6	279	8.6	4.7	14.1	13,977	19.0	2,734	19.2
Southern	1,140	16.1	1,174	36.0	8.9	26.6	11,949	16.2	1,102	7.7
Total	7,039	100.0	3,262	100.0	33.4	100.0	73,788	100.0	14,242	100.0

Hog production practices

Polish economic development, especially in agriculture, is greatly handicapped by lack of capital and poor transportation facilities. The least-developed sections are to be found adjacent to the Russian border, the most progressive next to the German border; in general, a gradual improvement in farming practices can be noted from east to west. The establishment and operation of bacon factories have done much to introduce improved practices in the communities in which they operate. Experiment stations connected with universities and using government grants have also aided in disseminating valuable information to farmers in their immediate vicinities. Since 1930, chambers of agriculture, supported by public funds, have maintained small staffs of specialists to aid Polish farmers in solving their problems and to teach them improved management, breeding, and feeding methods. Modern production practices as followed

THE HOG INDUSTRY IN POLAND, CONT'D

in other countries, however, can be given little consideration in Poland if they call for an outlay of cash on the part of the Polish hog producer. Production practices in the different sections of the country vary with feed supplies and the market which each section supplies.

In the bacon hog producing sections, production practices as near like those followed in Denmark as Polish conditions and feeds will permit are recommended by the chambers of agriculture, the experiment stations, and the bacon factories. The recommendations are followed to some extent. Several testing and control stations are operated by the chambers of agriculture, and efforts have been made to place breeding stock of a desirable type in the hands of the most progressive farmers. Limited government credits have been available for the latter purpose.

Peak farrowings come in the spring (March and April) and again in the fall (August, September, and October). There seems to be little, if any, tendency toward regular farrowings throughout the year, as in Denmark where regular farrowings insure the level deliveries required by factories producing mild-cured Wiltshire sides. It must be remembered, however, that not all hogs in the bacon areas are marketed at bacon weights of 185 to 210 pounds, many being carried to 350 to 440 pounds. So far as bacon hogs are concerned, deferred feeding practices permit a leveling of bacon-hog marketings, which would be impossible if all hogs marketed as baconers were developed rapidly after weaning. Inspected slaughter data for the years 1930-1934 (see table, page 359) show the seasonal tendency in slaughter to be one of heavy slaughter in the late fall and winter months with a decline in slaughter coming in the spring and reaching the low point in June or July.

When bacon-hog production was started in Poland, it was thought necessary to feed along Danish lines, using skim milk or other protein feeds along with grain. Under Polish conditions such feeding methods were too expensive, and the experiment stations soon found that satisfactory bacon hogs could be produced on a ration composed largely of potatoes. Recommended rations are 3 parts potatoes (4 pounds of potatoes are taken as equal to 1 pound of grain), 1 part milled grain, and a small amount of blood meal, or 9 parts potatoes, 3 parts grain, 1/2 part alfalfa meal, and 1/4 part bonemeal flour. Similar rations are also recommended for fat-hog production. Experiment stations have found that the average feed requirement for hogs marketed at weights under 220 pounds is from 4 to 4 1/2 pounds of a balanced ration per pound of gain. For hogs between 220 and 330 pounds the requirement increases to 5 pounds, over 330 pounds, to 6, and over 395 pounds, to 6 1/2 or 7 pounds.

It is probable that under farm conditions feed requirements will run considerably higher than those shown by experimental trials because

THE HOG INDUSTRY IN POLAND, CONT'D

only a small quantity of protein is actually used. Nitrogenous concentrates are a problem when not home produced because they involve a cash outlay. The use of skim milk is limited, but home-prepared alfalfa and clover meals have been used to some extent to supply the needed proteins. The small unit of hog production in Poland also permits kitchen garbage to be used more extensively for supplying protein requirements than it is in countries where hog production is conducted on a larger scale.

Waste feeds and pasture are employed to a large extent in maintaining the sow herds. From 22 to 26 pounds of potatoes and beets along with about .88 pound of clover daily are regarded as sufficient for maintaining brood sows through the winter. Occasionally a small amount of grain is added to the ration.

In the fat- and meat-hog producing areas, Polish feeds are an important factor in governing the situation. Farrowing twice a year is the aim, spring farrowing being the heavier in order that more pigs may be ready for concentrates after the harvest. Waste feeds are employed to a greater extent than in the bacon areas for maintaining sows and for developing feeder pigs. Sows are usually given additional feeds for a few weeks prior to farrowing. Fattening is done largely with potatoes. Horse beans, clover, rye, and barley are recommended and sometimes used as the protein supplement. Feed requirements per pig and other data obtained from feeding one lot of pigs for a period of 35 weeks at an experiment station in the fat-hog area are shown by the following:

Initial weight per pig.....	203 pounds
Final weight per pig.....	353 pounds
Feed consumption per pig:	
Barley.....	265 pounds
Horse beans.....	99 pounds
Green clover.....	66 pounds
Potatoes.....	1587 pounds

In the eastern section of the country some hogs are handled as in the other sections, but many are treated as scavengers. It is a common practice in certain districts to turn bred sows and others loose in the spring and permit them to shift for themselves in the forests, swamps, or on other undeveloped land. The sows return in the fall with their litters, and the other hogs, if the season has been good and mast plentiful, return in fairly good condition. Such hogs as are needed for meat are slaughtered. Others may be fattened further if surplus feed is available, or they may be carried through the winter on little more than a maintenance ration. In the spring, the procedure is repeated, and sometimes a hog reaches the age of 3 years before becoming fat. The meat from such hogs is fully as tough as would be expected from the method of handling, their lack of breeding, their age when fat, and the fact that most of the fat is deposited on the back and very little is striated with the lean meat.

THE HOG INDUSTRY IN POLAND, CONT'D

Marketing

From the hog producers' standpoint, Poland has the most inefficient and unsatisfactory marketing system of any important hog-producing country in Europe. The marketing system is largely the result of the small unit of hog production and the inadequate railway transportation and poor farm-to-market roads.

The Polish peasant living in outlying districts, other than in bacon-hog areas, who produces more than is needed by his family or immediate neighbors, is dependent on local or itinerant traders for a market for his hogs. Should he be in a position to deliver his hogs to the small village markets, he then becomes dependent on traders and buyers who assemble car lots for shipment to larger markets. In either case the spread between the price paid to the producer and the price paid by the consumer is great. This situation is generally recognized in Poland, but apparently little can be done about it. The outlying districts are not well served by railroads, roads are poor and in certain seasons impassable, and rarely does the farmer have more than one or two hogs for shipment, or transportation facilities to move them any great distance.

Distances to market are so great in Poland and weather conditions are such that the mortality of fat hogs during shipment to market is very high. Farmers, being reluctant to assume the risks involved in marketing their hogs at the larger markets themselves, prefer to sell their fat hogs at the farm or at a nearby village market, take what they can get, and let the traders or shippers assume the risk and reap the benefit. With government help, attempts have been made to establish cooperatives, but the Polish farmer is said to be a poor cooperator, and at present cooperative livestock marketing associations are not important in Poland. Consequently, under present conditions, the local and itinerant traders are performing a worthwhile service in taking the great risks incident to hog marketing in Poland and moving the hogs from farms or villages to consuming centers, but the cost of this service appears to be excessive.

In an effort to increase the amount paid to the farmer for his hogs, the Polish authorities, in issuing quotas to exporters for the shipment of hogs and hog carcasses to Germany under the recent trade arrangement, specified that the hogs should be bought direct from farmers in the eastern section of the country where farmers have had little opportunity to sell surplus hogs in the past. In the absence of a satisfactory marketing set-up, arrangements for the purchase of the hogs were made by representatives of the chamber of agriculture, who notified the farmers as to the time and place where buyers would purchase hogs for shipment to Germany. A satisfactory working of this arrangement may pave the way for an improvement in marketing, and the Government may possibly make further moves to correct the marketing situation.

THE HOG INDUSTRY IN POLAND, CONT'D

Market facilities are provided at all towns and cities by the municipalities, and it is probable that the most modern are to be found in the old German section. The municipal stockyards at Warsaw, the largest in Poland, are being remodeled and rebuilt, and when completed will provide adequate and modern facilities for receiving and slaughtering the city's meat supply. Markets at cities and towns are supplied largely by dealers and traders, who in turn secure their supplies from the village fairs or markets or direct from producers. Sales to butchers and other slaughterers are made through regular commission firms operating at the markets.

Farmers themselves supply few hogs direct to large city markets, except in the thickly populated districts. In keeping with the Government's desire to increase the price for hogs paid to farmers, the latter are being advised to market hogs themselves and avoid the trader middleman. The market corporation at Warsaw has inaugurated a plan which may encourage marketing by farmers. Under the new plan, hogs, after being sold to local butchers and slaughterers through commission agents, would be handled and slaughtered by the corporation for the purchaser, all charges accruing to the latter's account.

In December 1935, marketing and slaughter costs at Warsaw amounted to about 6.7 grosze per kilogram (.56 cent per pound) or about 10 zlote for a 150-kilogram hog (\$1.90 for a 330-pound hog). ^{a/} Should the total value of the hog be 100 zlote (\$19.00), taxes and commission charges (5 percent) would increase marketing costs by another 10 zlote (\$1.90) and bring the total, less shipping expense, to 20 percent of the value of the hog. Under the new plan, slaughter and handling charges would, of course, be reflected in the price paid to the farmer for hogs, but the farmer would not be mystified by the numerous charges, fees, and taxes which usually appear in an account of sales, since this price would be f.o.b. the yards with no charges deducted. It is entirely probable that this may have some influence in increasing marketing of hogs by farmers in the Warsaw district.

There is little communication between markets in Poland and practically no shifting of supplies from one large market to another. With this absence of a relationship between markets, prices at each individual market are determined by the supply and demand ruling at that particular place, and prices at any one market do not reflect conditions over the country as a whole. Apparently no concerted effort has been made in Poland to regulate the shipment of hogs in accordance with the demand at different markets.

In the Corridor and other bacon-hog producing sections the marketing system is somewhat better than in other districts, but even so

^{a/} According to officials at the Warsaw yard in December, the veterinary inspection fee amounted to 2.50 zlote per 100 kilograms (22 cents per 100 pounds); slaughter charges 2.50 zlote (22 cents); yarding .9 (8 cents); driving .4 (3 cents); weighing .4 (3 cents); total 6.60 zlote (58 cents).

THE HOG INDUSTRY IN POLAND, CONT'D

the situation leaves much to be desired. It is probable that, since the bacon-hog producing sections are more thickly populated, the farmer has greatest access to town and village markets. However, as in the case of other sections, he is dependent on the traders, and there is no uniformity of price at the several markets. Neither are the prices which are paid by different bacon factories uniform, the bacon factories drawing their supplies direct from farmers in their immediate territories and also purchasing additional supplies at the markets and from traders.

Recently a system of marketing bacon hogs under contracts between purchasers and bacon factories was inaugurated, and those farmers who have made contracts have been in a more favorable position than those who have depended on the open market for an outlet. The contracts are arranged by the representatives of the chambers of agriculture, who encourage farmers in a position to deliver bacon hogs direct to factories to do so. The chamber of agriculture representatives also determine the number of hogs suitable for delivery and the time of delivery. The producers have a leeway of one month and are not obligated to deliver, but the factories are obligated to take the hogs offered under contract. At first, the factories contracted for 15 percent of the hogs processed as bacon for export to England, and by gradually increasing the amount 75 percent were being contracted by January 1, 1936. The remaining 25 percent and such hogs as are processed other than for export to England may be purchased direct from non-contracting farmers, from dealers, or on the markets. The contracts assume that one-third of the contracted hogs will grade leanest, one-third lean, and one-third, fat. a/ Sufficient premiums over and above the open market price (using the price ruling at the market where the factory is located) are paid on hogs grading leanest and lean to bring the producer's price to a level agreed upon by the chambers of agriculture and the bacon factories.

Both prices and premiums vary with different factories. The idea of the chambers of agriculture seems to be the establishment of a price which will give the farmer production costs plus a reasonable profit, and also the maintenance of that price with relatively minor fluctuations, thereby avoiding marked increases and decreases in production. Since the bacon factories' profits on bacon exported to England are considerable and the contract system results in premiums on only 50 percent of the hogs processed for export to England, the profits on the remaining 50 percent are paid into a fund handled by the Bacon Export Corporation (the central association of all bacon factories) for use in making up losses when they occur, for subsidies of one form or another, and for other purposes. The profits derived from products other than those incident to the British trade are not involved in the scheme. The contract system has not been perfected by any means but is giving the bacon-hog producers considerable encouragement. Improvement in the hogs received by factories is also reported to have resulted.

a/ Polish bacon-hog grades are the same as Danish bacon-hog grades.

THE HOG INDUSTRY IN POLAND, CONT'D

Processing

Abattoirs are maintained by the municipalities in connection with the markets at all important cities and towns. As customary over most of Europe, slaughterers and butchers use the killing floors and other slaughter facilities, paying a fee for this privilege. Most of the processing beyond the dressed carcass stage is conducted on their own premises. Slaughter of cattle and sheep in Poland is all done by the kosher method.^{a/} Hog slaughter, however, is conducted as elsewhere in Europe.

Average slaughter weights of hogs in Poland are not available, and, as might be expected from the different hog types and market weights in different areas, slaughter weights probably vary in the several sections. In general, heavy hogs are wanted in the domestic trade. Slaughterers in the meat- and fat-hog sections report that they secure lard yields running from 15 percent or more of the dressed carcass weight. Slaughter data for a well-finished Golebska barrow follows:

	<u>Kilograms</u>	<u>Pounds</u>
Live weight	194.2	428.1
Slaughter weight	179.5	395.7
(Head and feet on. Blood, bristles, and intestines removed.)		
Lard yields	58.5	129.0
Leaf and intestinal fat.....	14.4	31.7
Intestines, heart, kidney.....	5.4	11.9
Blood	4.6	10.1
Bristles.....	1.6	3.5
Legs	2.4	5.3
Thickness of back fat varied from 7.5 to 10 centimeters (3 to 4 inches).		

Bacon factories

Bacon factories numbering 35 are located in the bacon-hog producing areas. The capacity of all factories is about 35,000 bacon hogs weekly. Bacon processing began in 1926 when about 6 factories began operation at points in the western part of Poland, using the facilities of the municipal abattoirs for slaughtering and doing the curing on their own premises. At present only 4 (two being Government owned, and 1 a cooperative) of the 35 plants are complete units in themselves. The remainder still use the municipal abattoirs for slaughtering and dressing. The factories which use the municipal abattoirs for slaughtering have installed in the

^{a/} Proposed legislation is aimed at a modification of the method of slaughter.

THE HOG INDUSTRY IN POLAND, CONT'D

abattoirs new and modern equipment of their own, which is more suitable for bacon-hog slaughtering on a large scale than that usually provided.

The bacon factories are well organized, with the head office of the central association, Bacon Export Corporation, located in Warsaw. The Corporation office is the contact for the factories in all dealings with the Government with respect to quotas, standardization, inspection, levies, subsidies, etc. It appears that the association is a strong organization and able to secure many advantages for the members. The Corporation also has a small staff of experts, who do some work in connection with the chambers of agriculture.

Green Wiltshire bacon is manufactured in Poland as much like the superior Danish product as Polish hogs, equipment, and conditions will permit. Prior to 1931, when the bacon industry in Poland was undergoing a mushroom-like growth and the infant industry was handicapped by small units of production, a lack of uniformity in its raw material, and a lack of capital, Polish bacon was anything but uniform and sold at a considerable discount. Rarely was it offered to the consumer in England as "Polish", the term "Continental" being most generally used by the retail trade in designating Polish bacon.

British law has made it necessary for imported bacon to be conspicuously branded with the name of the country of origin, and during the last couple of years a marked improvement has taken place in the uniformity and quality of Polish pork products which enter the export trade. The efforts of the Corporation in the direction of uniform cures and standardized butchering and grading have been largely responsible for the improvement. It also appears that, since the privately owned factories in Poland do not have the responsibility of disposing of surplus hog production, as do the cooperative factories in Denmark, they have been able to adjust their operations readily to the changed conditions. As the British quota has decreased, they have reduced their output and have not been confronted with large stores of mild-cured bacon which rapidly became stale. Consequently, they have been able to devote their attention to an improvement in their product.

In recent years, Polish factories have also produced a ham similar to the American short-cut, but of a much lower quality, showing careless butchering and trimming and sometimes a questionable cure. During 1935, in an effort to find export outlets to offset the rapidly declining British trade, most of the ham producing bacon factories turned their attention to, and greatly increased the production of, boned boiled tinned hams. This latter product is an excellent meat, well prepared and attractively packaged, and has been well received in England, the United States, and other countries to which it has been exported.

THE HOG INDUSTRY IN POLAND, CONT'D

In addition to bacon and hams, the bacon factories make lard and many varieties of prepared meats and sausages. Some of them engage in an export trade in live hogs, eggs, dressed poultry, and butter.

Lard production

Practically all of the municipal abattoirs have facilities, mostly open kettles, for rendering lard. All of the lard rendered at the abattoirs or by butchers is used for domestic consumption. The bacon factories utilize their fats in prepared meats and sausages, or render lard in their own plants. Several of the factories located in the former German area have installed Danish centrifugal kettles. ^{a/} Others use open kettles or make prime steam lard, which is sent to the country's one refining plant for refining.

The lard refining plant started originally as a plant for handling vegetable oils and began full operation on lard in 1931. The plant has a capacity of about 5 cars (55 short tons) a day. The raw materials are obtained from members of the bacon union or others who want lard refined for export. All refining of prime steam lard for export is done at this plant.

Open kettle lard is put in tierces. Generally it is not clean and is poor in texture and color. When reworked and treated with alkali and fullers earth, a fairly uniform product is obtained, most of which is exported to England. Refined lard is packed in boxes of 25 kilograms (55 pounds), the standard pack used in Europe.

Lard yields from bacon hogs are similar to those obtained in other hog-producing countries and run from 3 percent to 4 percent of the slaughter weight. Considerably more fat is obtained from the meat and fat hogs which are processed by bacon factories, and yields up to 20 percent or more of the dressed carcass weight are common. The relatively small quantity of fat obtained from bacon hogs, the small unit of production, and the difficulties involved in the handling of fats make lard production costs in Poland very high. Lard prices on the domestic market are well above world prices as a result of the policy followed by the Government of restricting the import of animal fats and vegetable oils, despite the fact that Poland is a deficit fat country. On the domestic market, Polish lard producers are able to obtain production costs, but when lard is exported, an export subsidy is necessary.

^{a/} Under the rendering system which uses the Danish centrifugal kettle, fats are melted in a retort under pressure for 3.5 to 4 hours. A stream of melted lard is then introduced into a stream of cold water, from which it immediately separates and is pumped into tanks through cooled coils. The action of the water, in addition to cooling the lard and removing dirt, gives the lard a whiter color than it would have otherwise.

THE HOG INDUSTRY IN POLAND, CONT'D

Veterinary inspection

The Veterinary Inspection Service is one of the most efficient branches of the livestock industry in Poland. Numbers of livestock were greatly depleted during the war, and the veterinary service has maintained a careful inspection on imported animals and also guarded against disease outbreaks within Poland during the reconstruction period. The Service points with considerable pride to the relative freedom from disease enjoyed by Polish livestock. When the sanitary methods followed by small landowners, who own the majority of Polish livestock, are considered, the accomplishments of the Service appear more noteworthy. At present, most disease difficulties are said to originate next to or near the Russian and Rumanian frontiers.

Considerable care is exercised in the inspection of animals slaughtered for human consumption, particularly in the inspection of animals and products entering the export trade, and the inspection service is being constantly improved. Animals suspected as a result of pre-mortem examinations are not permitted to be slaughtered on the same killing floor as animals passed as healthy or fit for food. Post-mortem inspection of the carcasses and viscera, with special emphasis on examinations for trichinosis and other diseases which can be communicated to man, are made. Well-equipped laboratories for microscopic and bacterial examinations are maintained at Warsaw and are reported to be maintained at other important consuming centers. All meat which is not slaughtered at the point of consumption must go through the municipal market and be passed on by a qualified veterinarian before being offered for sale in the cities. The handling received by meat in the domestic trade after leaving the slaughterhouse, however, does not appear to be in keeping with the very careful inspection which it has received up to that time.

A Polish law of a few years ago requires that all animals slaughtered for human consumption must be inspected by a qualified veterinarian; so legally there is no non-inspected slaughter in Poland. Obviously, it is not possible to prevent certain non-inspected farm slaughter in remote districts.

Foreign tradeBacon

Bacon exports to England have been the most important single item in the Polish hog and pork export trade. Bacon exports reached a peak in 1932. Since then they have declined as a result of the British restrictions on imports. The basic period used in establishing quotas did not give Poland any such share of the trade as was had in 1931 and 1932, the present share representing 7.95 percent of the foreign quota. Prior to 1933 when reduced supplies brought about higher bacon prices in England, bacon exports

THE HOG INDUSTRY IN POLAND, CONT'D

were subsidized by the Polish Government, through a system of certificates which could be used for paying duty on imports during those periods when exports would have shown a loss if aid had not been given. It is very doubtful if the aid given through government subsidies was reflected in the price paid to farmers for hogs. Since the British quota was adopted, exports of bacon from Poland to England have not been subsidized, British prices having permitted profitable operations.

POLAND: Annual exports of bacon, total and to England, 1929-1935

Year	To England	Total
	<u>1,000 pounds</u>	<u>1,000 pounds</u>
1929.....	25,972	26,550
1930.....	53,663	53,757
1931.....	116,646	116,646
1932.....	118,163	118,171
1933.....	88,395	88,395
1934.....	51,520	51,540
1935.....	44,970	44,988

Berlin office, Foreign Agricultural Service.

Future possibilities in the bacon export trade are dependent on the course followed by Great Britain. When the promised levy on imported bacon, which is to be used for subsidizing British hog producers, becomes a reality and import quotas of foreign supplying countries are increased, Poland will be able to export more bacon to England but in all probability will receive a lower price. A reduced price will necessitate changes in the contract and premium system now being followed in bacon-hog purchases, and the Poles seem to prefer the smaller quota and higher price to the expected changes.

Ham

Prior to 1935, ham exports from Poland were made up almost entirely of mild-cured green hams which were sent to England. In 1935, the change to boiled tinned ham production resulted in a material increase in ham exports. The quantity sent to the United States, even though representing a very insignificant part of that country's ham supplies, was the feature of the Polish 1935 export ham trade. Since the British quota was adopted, ham exports to England form a part of the bacon and ham quota and have not been subsidized. It is also reported that subsidies paid on ham exports to the United States were discontinued some time ago, but during the latter part of 1935 a subsidy of 25 grosze per kilogram (2.15 cents per pound) was

THE HOG INDUSTRY IN POLAND, CONT'D

will be dependent upon import restrictions which are encountered in ham importing countries and ability to subsidize the trade when necessary.

POLAND: Exports of ham, 1933-1935

Year	England	Austria	Belgium	United States	Total
	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>
1933.....	8,761	73	-	-	9,147
1934.....	3,328	-	42	-	3,393
1935.....	4,343	240	1,075	4,653	12,025

Berlin office, Foreign Agricultural Service.

Other pork

The Polish export trade in fresh, frozen, and salted pork has been greatly reduced compared with that prior to 1932 and is not of important proportions. Pork exports are mostly in the form of dressed carcasses, and the increase in exports in 1935 came about largely through increased takings of hog carcasses by Germany and Belgium. Beginning with the last week in November, Germany took approximately 5,600 hogs weekly from Poland, two-thirds of them being in the form of dressed carcasses. During the latter part of 1935, exports of dressed carcasses to Belgium increased greatly and at times amounted to 4,000 weekly. Exports of pork to Belgium and Germany are not subsidized. In fact, the price received by exporters for German shipments is such that in addition to paying a rather high price direct to farmers in the Vilna district for fat hogs, 75 to 80 grosze per kilogram live weight (6.5 to 6.9 cents per pound) the exporter also pays into the Exchange Fund 28 zloté per 100 kilograms (\$3.41 per 100 pounds) on the live hogs and 33 zloté per 100 kilograms (\$2.84 per 100 pounds) on the dressed carcasses which are exported.

POLAND: Exports of fresh, frozen, and salted pork, 1928-1935

Year	Austria	Germany	Czecho-slovakia	Belgium	England	Total
	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>	1,000 <u>pounds</u>
1928...	33,379	118	1,131	-	11,889	46,623
1929...	14,709	75	822	-	5,433	21,844
1930...	15,152	18	1,271	-	a/	17,035
1931...	14,738	-	10,617	-	-	26,765
1932...	2,530	-	168	-	-	2,986
1933...	2,531	-	47	-	-	3,188
1934...	3,091	-	-	-	-	3,163
1935...	3,541	3,349	-	b/ 1,543	-	8,757

Berlin office, Foreign Agricultural Service.

a/ Less than 500 pounds. b/ Approximate.

THE HOG INDUSTRY IN POLAND, CONT'D

Practically all exports of pork take place under special trade arrangements and are handled through quotas issued to exporters by the Government. Under present conditions in Europe, the pork export trade appears to depend to a large extent on barter agreements and Polish ability to absorb the industrial goods which are offered in payment for pork exports. Inability to absorb sufficient German goods in December 1935 to balance payments necessitated a 20-percent reduction in the Polish export quota to Germany in January 1936.

Lard

Poland had little, if any, export trade in lard prior to 1934, and present exports are of minor importance. Poland is really a deficit fat country and before 1931 imported fair quantities of lard, most of which came from the United States. Lard imports accounted for 2 percent of the total value of Polish imports in 1928. In 1931, lard tariff rates, which had been 3 zloty per quintal (.258 cent per pound) since 1924 were doubled, except for quota lard, and imports sharply declined. In 1934, in keeping with the Polish Government's policy of replacing imported by domestic raw materials in an effort to protect the country's currency, domestic production of oilseeds and fat hogs was given considerable stimulus by the restrictions placed on imports of fats and raw materials, the higher tariffs, and the resulting increase in domestic fat prices.

Polish lard production increased in 1934 and 1935, but, due to the very low purchasing power of Polish consumers and to high fat prices, consumption declined and stocks of domestic lard accumulated. The lard stocks had a depressing effect on hog prices, and beginning in April 1935 the Polish Government subsidized the export of lard at the rate of 12 grosze per kilogram (1.03 cents per pound). Later the subsidy was advanced to 20 grosze (1.72 cents) again to 28 grosze (2.41 cents) but in December 1935 was reduced to 25 grosze (2.15 cents). The effect of the subsidized exports was an advance in domestic lard prices. Lard prices, which in March 1935 averaged 80-90 grosze (6.89-7.76 cents per pound) averaged 150-160 grosze (12.93-13.79 cents) 4 months later, reached 200-220 grosze (17.24-18.96 cents) in September, but declined below 200 grosze (17.24 cents) by the end of November. Lard exports have not been regular, and appear to be resorted to mainly for the purpose of reducing stocks and raising the domestic price of lard and, consequently, the price of hogs. The declining prices at the end of 1935 were expected to bring about exports in early 1936. In view of this situation, with high lard production costs, and the fact that increased hog production in the United States is imminent, material expansion in the Polish export trade in lard is not to be expected.

THE HOG INDUSTRY IN POLAND, CONT'D

POLAND: Imports and exports of lard, 1929-1935

Year	Imports		Exports			
	United States:	Total	Russia	England	Germany	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1929...	29,247	35,143	-	-	-	-
1930...	24,235	26,549	-	-	-	-
1931...	566	576	-	-	-	-
1932a/	-	-	-	-	-	-
1933a/	-	-	-	-	-	-
1934...	4	524	402	-	3	450
1935...	9	27	2	6,574	260	7,395

Berlin office, Foreign Agricultural Service. a/ Not available.

Live hogs

Live hog exports from Poland have shown a marked decline since 1928. During the years 1928 to 1932 a part of the decline in live hog exports was no doubt due to increased processing of hogs in Poland for export as bacon to England, but most of the decline since 1931 may be accounted for by the efforts made by Austria and Czechoslovakia to increase their own hog production. The increase in live hog exports in 1934 and 1935 as compared with 1933 has come about through barter agreements. Austria, Czechoslovakia, and Germany continue as the most important outlets for Polish live hogs. Live hogs make one-third of the hog shipments to Germany under the recent agreement, and 65 percent of the live hogs exported to Germany in 1935 were sent in December after the arrangement came into operation. Austria takes 2,500 live hogs weekly, about 2,200 of which are meat hogs for the Vienna market. Exports to Austria and Czechoslovakia, those to the latter also being on a weekly basis, vary from time to time. At present all live hog exports are the result of special trade arrangements and are handled through quotas granted to exporters. As with pork exports, future developments in the live hog export trade appear to depend on barter agreements and ability to absorb goods offered in payment for hogs.

POLAND: Live hog exports, 1928-1935

Year	Austria	Czechoslovakia	Germany	Total
	Number	Number	Number	Number
1928.....	613,795	657,006	7,880	1,279,138
1929.....	379,323	488,233	12,983	959,958
1930.....	342,034	363,259	14,804	720,847
1931.....	318,928	25,564	19,042	373,946
1932.....	158,410	15,610	12,300	192,588
1933.....	84,540	1,984	16,228	107,115
1934.....	112,843	9,371	18,895	154,620
1935.....	126,807	9,791	10,165	150,779

Berlin office, Foreign Agricultural Service.

THE HOG INDUSTRY IN POLAND, CONT'D

Present trade situation and government policies

Exports of hogs and pork products from Poland vary considerably from year to year. Fluctuations in the amounts exported are due more to conditions in foreign markets than to changes in Polish production. The hog industry has gone through a difficult and trying period during the years 1932 to 1934, but Poland has not found it necessary to reduce hog production to any such degree as have certain other pork-exporting countries. Indeed, hog production is such an integral part of Polish agriculture that it would be very difficult to replace it; consequently, marked declines in hog production, other than those which might result from severe crop failures or epidemics, are not likely.

From a production point of view, Poland has numerous advantages which would permit considerable expansion in the hog industry if conditions should warrant an increase. Outstanding among the advantages is the fact that Poland is a natural hog-producing country with low production costs, is independent of imported feeds, and is capable through shifts in crops of expanding feed production. The Polish hog industry is more versatile than is usually the case in Europe, hogs in that country being of a type which can be rapidly changed to meet different demands. From a geographical standpoint, the country's location adjacent to the deficit hog and fat areas of Central Europe is a favorable one, and the political advantages which western countries can derive from economic and security pacts with Poland are obvious.

Most of the difficulties confronting Polish hog production have to do with the demand side of the industry and marketing, and these handicaps are so great that they outweigh many of the advantages. The depression has left Polish consumers with such low buying power and has created such a financial situation in the natural export outlets that an increase in hog production at present is not indicated. Not only is the Polish consumption of pork reduced, but the present methods of conducting international trade in Europe makes the economic situation of Polish consumers doubly depressing on the hog industry. Natural markets for Polish hog and pork exports, Germany, Austria, and Czechoslovakia, are able to pay only with goods, and Polish consumers are unable to absorb sufficient quantities of the industrial goods of those countries to balance payments for the hogs which Poland is in a position to export. The poor marketing system greatly reduces the proportion of the consumer's price which is received by the producer, and inadequate transportation facilities, the small unit of hog production, and the lack of capital tend to make an effective correction of the marketing handicap extremely difficult..

THE HOG INDUSTRY IN POLAND, CONT'D

Changes in agriculture in Poland develop slowly, and a further shift from grain exporting to hog production and pork exporting cannot be expected until the latter become more profitable than the former. Under present conditions, a marked change in this direction appears unlikely, but Government policies may alter the situation and make possible an increase in hog production.

Since the present Government is committed to an improvement in general agricultural conditions, it is fostering agriculture of a peasant type and encouraging expansion in the production and export of livestock. Heretofore the Government has heavily subsidized the export of grain; but, under the announced policy for the future, ^{a/} the aim will be to convert grains and other feeds into more valuable products through livestock. Such a policy appears to be a sound one for Poland, but it must be remembered that hitherto the Poles have not been able rigidly to pursue outlined policies and that much depends upon economic, political, and seasonal crop developments in Europe as a whole.

The foreign trade policy ^{formed} found by the Polish Government is said to be one directed toward multilateral agreements and most-favored-nation treatment rather than the present bilateral trade agreements, which involve clearings and compensations. Such a policy would be expected from the country's position as a debtor country, the poor market which it is able to offer to the exporters of other countries, and the surplus products which it desires to export. The present bilateral agreements which Poland has negotiated have been accepted in order to obtain export outlets. It is extremely doubtful if Poland will be able, under present conditions in Europe, to get away from this type of agreement. The Polish Government in the past has also found it necessary to subsidize the export of livestock products, although not to the same extent as that of grain, and under present conditions in international trade increased exports of hogs and pork products from Poland suggest the employment of subsidies in one form or another.

It appears that the greatest possibilities along lines of increased hog production to be derived from the policy indicated will come from the improvement which may take place in economic conditions. Increased purchasing power among Polish consumers would permit not only increased consumption of pork in Poland but also an increased export of hogs and pork through the increased ability of Polish consumers to absorb the industrial goods of deficit countries.

a/ This policy is similar to the one adopted by Denmark in the 1880's when Danish export grain markets were lost through competition with the grain-producing countries of the New World.

THE HOG INDUSTRY IN POLAND, CONT'D

A part of the new policy of improving the economic position of agriculture involves a lowering of prices of goods which the farmer buys, a maintenance of agricultural prices, and an increase in the proportion of the consumer's price which the producer receives. Recent developments in this connection have been a reduction in railway rates, the abolishment of many cartels, and a reduction in prices received for the products of other cartels.

In addition to the measures previously mentioned, the agrarian reform policy is also directed toward an improvement of the economic and cultural level of the rural population. Studies in Poland have shown that farms of less than 5 hectares (12 acres) are rarely self-supporting, and, although the minimum acreage of a self-supporting farm varies with the section in which it is located, the investigations have revealed that the highest average incomes from 1926 to 1933 were obtained from holdings of 5 to 15 hectares (12 to 37 acres). Through the breaking up of large estates it is hoped to increase the number of self-supporting middle-sized farms.

The changes which are necessary, if a marked expansion in hog production and pork exports is attained, will require both time and money and appear to be largely dependent upon economic and political developments in Europe.

POLAND: Production and per capita consumption of meat
1934, with comparisons

Period and item	Pork	Beef	Veal	Mutton	Horse	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
<u>1932</u>						
Production.....	914,380	465,700	121,738	16,579	2,072	1,520,469
Consumption.....	776,063	465,562	117,571	15,212	1,521	1,375,935
Export surplus....	138,317	132	4,167	1,367	551	144,534
<u>1934</u>						
Production.....	935,963	353,067	118,122	19,930	1,940	1,429,022
Consumption.....	874,521	353,045	116,050	18,651	1,036	1,363,303
Export surplus....	61,442	22	2,072	1,279	904	65,719
Per capita consumption:	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Average						
1928-1932.....	24.25	13.05	3.35	.60	.09	41.34
Annual						
1931.....	26.17	12.76	3.59	.51	.04	43.08
1932.....	23.94	14.37	3.64	.46	.04	42.46
1933.....	23.06	13.27	3.53	.46	.04	40.37
1934.....	26.34	10.63	3.48	.55	.02	41.03

Compiled by the Berlin office, Foreign Agricultural Service, from official sources.

THE HOG INDUSTRY IN POLAND, CONT'D

POLAND: Hog slaughter, inspected and on farms, 1930-1935

Year	First quarter	Second quarter	Third quarter	Fourth quarter	Total
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>
<u>Average</u>					
<u>1930-1934</u>					
Inspected...	929,849	823,282	832,520	989,027	3,574,678
Farm.....	258,103	113,661	83,765	368,277	828,808
Total.....	1,187,954	936,943	916,285	1,357,304	4,398,486
<u>1930</u>					
Inspected...	686,070	691,624	689,268	909,488	2,976,450
Farm.....	201,690	103,469	76,420	350,170	731,749
Total.....	887,760	795,093	765,688	1,259,658	3,708,199
<u>1931</u>					
Inspected...	1,057,934	928,784	905,675	1,130,760	4,023,153
Farm.....	300,881	121,130	102,514	457,140	981,665
Total.....	1,358,815	1,049,914	1,008,189	1,587,900	5,004,818
<u>1932</u>					
Inspected...	1,067,359	848,088	913,534	961,883	3,790,864
Farm.....	301,092	124,571	81,224	339,023	845,910
Total.....	1,368,451	972,659	994,758	1,300,906	4,636,774
<u>1933</u>					
Inspected...	911,398	842,578	815,853	924,544	3,494,873
Farm.....	224,561	115,354	68,762	289,052	697,729
Total.....	1,136,459	957,932	884,615	1,213,596	4,192,802
<u>1934</u>					
Inspected...	925,992	805,334	838,265	1,018,460	3,588,051
Farm.....	262,294	103,783	89,907	406,002	861,986
Total.....	1,188,286	909,117	928,172	1,424,462	4,450,037
<u>1935</u>					
Inspected...	943,437	936,961	892,830		
Farm.....	263,974	153,258	93,634		
Total.....	1,207,411	1,090,219	986,464		

Berlin office, Foreign Agricultural Service.

WHEAT: Closing Saturday prices of May futures

Date	Chicago		Kansas City		Minneapolis		Winnipeg a/		Liverpool a/		Buenos Aires b/	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
High c/...	100	103	98	102	108	112	85	89	77	96	d/ 56	d/ 94
Low c/...	92	97	90	94	100	107	82	83	69	89	d/ 54	d/ 91
Feb. 21...	97	99	94	97	104	108	83	84	71	90	55	91
29...	98	100	95	98	105	109	84	84	71	90	56	91
Mar. 7...	96	100	92	97	103	108	83	85	71	91	55	91
14...	92	100	90	98	100	108	82	85	72	93	55 e/	92

a/ Conversions at noon buying rate of exchange. b/ Prices are of day previous to other prices. c/ January 1 to date. d/ March and May futures. e/ June futures.

WHEAT: Weekly weighted average cash price at stated markets

Week ended	All classes and grades six markets		No. 2 Hard Winter Kansas City		No. 1 Dk.N.Spring Minneapolis		No. 2 Hard Amber Durum Minneapolis		No. 2 Red Winter St. Louis		Western White Seattle a/	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
High b/...	114	108	103	118	120	135	147	123	105	111	86	90
Low b/...	104	100	95	107	111	125	131	115	92	106	81	85
Feb. 22...	111	106	-	111	116	132	136	-	98	108	86	85
29...	108	107	100	113	116	126	135	118	98	111	86	87
Mar. 7...	105	104	98	108	113	130	135	123	96	110	83	88
14...	104	100	95	109	111	125	131	115	92	108	81	

a/ Weekly average of daily cash quotations, basis No. 1 sacked 30 days delivery.
b/ January 1 to date.

WHEAT: Acreage in India, 1931 to 1936

Harvest year	Second estimate	Final estimate
	1,000 acres	1,000 acres
1931.....	31,028	32,189
1932.....	33,747	33,803
1933.....	32,386	32,976
1934.....	34,683	35,992
1935.....	33,811 <i>33,774</i>	33,774 <i>34,485</i>
1936.....	33,329	

Director of Statistics, Calcutta.

FEED GRAINS: Acreage, specified countries, annual 1933-1936

Crops and countries reported in 1936	1933	1934	1935	1936	Percentage 1936 is of 1935
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Percent
BARLEY					
United States.....	10,009	7,095	12,858	a/ 13,017	+ 1.2
France b/.....	353	416	438	452	+ 3.2
Spain.....	4,633	4,752	4,549	4,528	- 0.5
Germany b/.....	672	757	958	1,005	+ 4.9
Czechoslovakia b/..	13	11	14	15	+ 7.1
Greece.....	554	526	544	529	- 2.8
Bulgaria b/.....	491	446	429	425	- 0.9
Rumania b/.....	212	200	227	230	+ 1.3
Total 7 European countries.....	6,928	7,108	7,159	7,184	+ 0.3
Egypt.....	292	284	281	284	+ 1.1
Total 9 countries	17,229	14,487	20,298	20,485	+ 0.9
Estimated Northern Hemisphere total, excluding China	87,700	89,100	91,600		
OATS					
United States.....	36,701	30,172	39,714	a/ 39,785	+ 0.2
France b/.....	2,111	1,983	2,169	2,114	- 2.5
Total 2 countries	38,812	32,155	41,883	41,899	0.0
Estimated Northern Hemisphere total, excluding China	135,400	131,900	139,500		

Compiled from official sources. a/ Intentions to plant. b/ Winter acreage only.

EGYPT: Wheat and barley acreages, 1931 to 1936

Harvest year	Wheat	Barley
	1,000 acres	1,000 acres
1931.....	1,649	306
1932.....	1,762	366
1933.....	1,426	292
1934.....	1,441	284
1935.....	1,463	281
1936.....	1,453	284

International Institute of Agriculture, Rome.

FEED GRAINS AND RYE: Weekly average price per bushel of corn, rye, oats, and barley at leading markets a/

Week ended	Corn						Rye		Oats		Barley	
	Chicago			Buenos Aires			Minneapolis		Chicago		Minneapolis	
	No. 3 Yellow		Futures	Futures			No. 2		No. 3 White		No. 2	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
High b/...	96	62	90	61	43	42	80	58	58	31	113	74
Low b/...	83	60	79	60	38	39	62	53	50	28	97	58
			May	May	May	May						
Feb. 15..	89	61	85	61	39	c/ 39	69	57	56	30	106	63
22..	89	62	87	61	39	39	70	56	55	31	109	58
29..	87	61	85	61	39	40	67	56	54	30	109	74
Mar. 7..	84	62	82	61	39	41	-	55	52	29	106	69
14..	83	61	79	61	38	d/42	62	53	50	28	97	68

a/ Cash prices are weighted averages of reported sales; future prices are simple averages of daily quotations. b/ For period January 1 to latest date shown.

c/ April futures. d/ June futures beginning March 11.

FEED GRAINS: Movement from principal exporting countries

Item	Exports for year		Shipments 1936, week ended a/			Exports as far as reported		
	1934-35							
	1933-34	b/	Feb. 29	Mar. 7	Mar. 14	July 1 to	b/	b/
BARLEY, EXPORTS: c/	1,000	1,000	1,000	1,000	1,000		1,000	1,000
United States...	5,935	4,050	46	126	242	Mar. 14	3,763	7,789
Canada	1,547	14,453				Feb. 29	11,567	4,570
Argentina.....	23,781	20,129	d/ 551	d/ 675	d/ 239	Mar. 14	15,457	5,563
Danube coun. d/..	27,707	7,870	0	0	0	Mar. 14	7,324	8,244
Total	58,970	46,502					38,111	26,166
OATS, EXPORTS: c/								
United States...	1,405	1,147	3	22	2	Mar. 14	577	708
Canada	8,336	17,407				Feb. 29	12,632	11,204
Argentina	20,385	44,072	d/ 69	d/ 331	d/ 193	Mar. 14	36,594	7,731
Danube coun. d/..	2,027	10	0	0	0	Mar. 14	10	40
Total.....	32,153	62,636					49,813	19,683
CORN, EXPORTS: e/						Nov. 1 to		
United States...	4,832	881	1	14	3	Mar. 14	513	152
Danube coun. d/..	19,913	14,982	9	153	238	Mar. 14	9,848	2,726
Argentina.....	228,864	256,143	d/4,352	d/4,656	d/5,658	Mar. 14	62,484	110,907
South Africa d/..	8,583	21,882	94	77	17	Mar. 14	9,140	5,345
Total	262,192	293,894					81,985	119,130
United States imports.....	1,362	41,141				Jan. 31	3,529	5,612

Compiled from official and trade sources. a/ The weeks shown in these columns are nearest to the date shown. b/ Preliminary. c/ Year beginning July 1. d/ Trade sources. e/ Year beginning November 1.

COTTON: Price per pound of representative raw cotton at Liverpool,
March 13, 1936 with comparisons

Description	1936								
	January			February				March	
	17	24	31	7	14	21	28	6	13
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
American -									
Middling.....	12.66	12.83	12.80	12.69	12.92	12.82	12.56	12.73	13.04
Low Middling.....	11.83	12.00	11.97	11.81	12.04	11.95	11.69	11.85	11.80
Egyptian (Fully good fair)									
Sakellaridis.....	19.76	20.14	20.20	19.88	19.09	18.85	18.78	19.13	19.38
Uppers	15.08	15.27	15.24	15.16	15.10	14.80	14.68	15.14	15.38
Brazilian (Fair) -									
Ceara	12.56	12.73	12.70	12.55	12.71	12.61	12.25	12.31	12.42
Sao Paulo.....	12.97	13.15	13.11	12.96	13.12	13.03	12.77	12.83	13.15
East Indian -									
Broach (Fully good)....	10.97	11.05	10.92	10.77	10.94	10.85	10.52	10.61	10.85
Comra No. 1, Fine.....	10.90	10.73	10.61	10.54	10.67	10.58	10.33	10.42	10.60
Sind (Fully good).....	8.63	8.82	8.83	8.78	9.05	8.96	8.80	8.88	9.07
Peruvian (Good)									
Tanguis.....	15.35	15.54	15.51	15.37	15.52	15.52	15.26	-	-

Compiled by Foreign Agricultural Service Division. Converted at current exchange rate.

APPLES: Production in the Danube Basin, average 1929-1933,
annual 1934 and 1935

Country	Average 1929-1933	1934	1935
	Short tons	Short tons	Short tons
Yugoslavia.....	147,495	135,919	170,000
Rumania.....	120,000	140,000	100,000
Bulgaria.....	1,896	4,004	6,000
Hungary	2,000	1,488	2,480
Total	271,391	281,411	278,480

Compiled by the Belgrade office of the Foreign Agricultural Service from official sources.

CHINA: Imports of raw cotton by growers, January 1936
with comparisons

Growth	January		October-January	
	1935	1936	1935	1936
	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>
American....	14,964	7,127	41,578	19,064
Indian.....	6,250	439	23,796	4,261
Egyptian....	5,782	3,417	14,402	8,890
Others.....	--	--	1,022	281
Total.....	26,996	10,983	80,798	32,496

Shanghai office, Foreign Agricultural Service. In bales of 500 pounds.

CHINA: Preliminary Shanghai arrivals of raw cotton, February 1936
with comparisons

Growth	February		October-February	
	1935	1936	1935	1936
	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>
American....	10,548	2,200	41,560	30,248
Indian.....	1,481	400	20,696	4,440
Chinese.....	45,805	84,562	408,735	552,135
Egyptian....	2,903	1,832	16,685	11,276
Others.....	--	--	177	--
Total....	60,737	88,994	487,853	598,099

Shanghai office, Foreign Agricultural Service. In Bales of 500 pounds.

CHINA: Deliveries of raw cotton to Shanghai mills, February 1936
with comparisons

Growth	February		October-February	
	1935	1936	1935	1936
	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>	<u>Bales</u>
American...	12,000	11,000	65,000	35,000
Indian.....	3,000	a/	30,000	7,000
Egyptian...	3,000	2,000	16,000	11,000
Chinese.....	31,000	71,000	266,000	472,000
Others.....	--	--	2,000	--
Total	49,000	84,000	379,000	525,000

Shanghai office, Foreign Agricultural Service. a/ Negligible.

BUTTER: New Zealand gradings, 1935-36 season to March 6,
with comparisons

Date	1933-34	1934-35	1935-36
	1,000 pounds	1,000 pounds	1,000 pounds
Total August 1 to November 30..	126,694	123,320	119,554
Week ended			
December 7.....	10,976	10,192	10,696
14.....	10,517	9,968	10,696
21.....	10,640	9,800	10,080
28.....	9,352	8,904	10,192
December total.....	41,485	38,864	41,664
January 4.....	9,565	8,400	10,416
11.....	9,565	8,456	9,688
18.....	9,016	8,116	9,520
25.....	8,232	7,616	9,736
January total.....	36,378	32,588	39,360
February 1.....	8,176	6,944	9,520
7.....	7,784	6,272	9,736
14.....	7,168	5,656	8,798
21.....	7,840	5,999	8,848
28.....	7,280	6,216	8,064
February total.....	38,248	31,037	44,968
March 6.....	7,336	6,328	7,784
Total August 1 to March 6.....	250,141	232,247	253,332

Agricultural Attaché C. C. Taylor, London.

BUTTER: Price per pound in New York
San Francisco, Copenhagen, and London, March 19, 1936, with comparisons

Market and description	1936		1935
	March 12, Cents	March 19, Cents	March 21, Cents
New York, 92 score.....	31.8	32.0	30.0
San Francisco, 92 score.....	34.0	33.0	28.0
Copenhagen, official quotation	21.4	21.3	16.0
London:			
Danish.....	27.0	26.8	21.6
New Zealand.....	18.9	17.8	15.4
Dutch.....	19.8	18.8	a/

Foreign prices converted at current rates of exchange. a/ Not available.

GRAINS: Exports from the United States, July 1-March 14, 1934-35 and 1935-36

PORK: Exports from the United States, Jan. 1-March 14, 1935 and 1936

Commodity	: July 1-March 14 :		Week ended			
	: 1934-35:	: 1935-36:	Feb.22	: Feb.29	: Mar. 7	: Mar.14
	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000
GRAINS:	: bushels:	: bushels:	: bushels:	: bushels:	: bushels:	: bushels:
Wheat <u>a/</u>	: 2,977:	: 205:	: 0:	: 24:	: 0:	: 0
Wheat flour <u>b/</u>	: 13,310:	: 9,593:	: 103:	: 197:	: 75:	: 212
Barley <u>a/</u>	: 3,765:	: 7,789:	: 62:	: 46:	: 126:	: 242
Corn.....	: 1,868:	: 124:	: 1:	: 1:	: 14:	: 3
Oats.....	: 84:	: 304:	: 0:	: 3:	: 22:	: 2
Rye.....	: 0:	: 6:	: 0:	: 0:	: 0:	: 0
	: Jan. 1	: Mar.14	:	:	:	:
	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000
PORK:	: pounds:	: pounds:	: pounds:	: pounds:	: pounds:	: pounds:
Hams and shoulders.....	: 6,687:	: 3,604:	: 117:	: 134:	: 42:	: 71
Bacon, including sides..	: 1,898:	: 1,013:	: 220:	: 192:	: 80:	: 47
Pickled pork.....	: 2,075:	: 1,016:	: 64:	: 80:	: 10:	: 60
Lard, excluding neutral:	: 38,135:	: 19,522:	: 1,677:	: 1,187:	: 1,366:	: 2,476

Division of Statistical and Historical Research. Official records, Bureau of Foreign and Domestic Commerce. a/ Included this week: Pacific ports, wheat, none; flour 7,400 barrels, from San Francisco; barley 242,000 bushels; rice 1,119,000 pounds. b/ Includes flour milled in bond from Canadian wheat, in terms of wheat.

WHEAT, INCLUDING FLOUR: Shipments from principal exporting countries as given by current trade sources, 1933-34 to 1935-36

Country	: Total		: Shipments 1936		: Shipments	
	: shipments	:	week ended	:	: July 1-Mar.14	:
	: 1933-34:	: 1934-35:	Feb.29	: Mar.7	: Mar.14:	: 1934-35:1935-36
	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000	: 1,000
	: bushels:	: bushels:	: bushels:	: bushels:	: bushels:	: bushels:
North America <u>a/</u>	: 220,616:	: 168,712:	: 5,288:	: 3,236:	: 3,140:	: 126,328:144,176
Canada, 4 markets <u>b/</u>	: 194,213:	: 176,059:	: 2,456:	: 568:	: 1,802:	: 142,449:187,635
United States <u>c/</u>	: 37,002:	: 21,532:	: 221:	: 75:	: 212:	: 16,288: 10,003
Argentina.....	: 140,128:	: 186,228:	: 1,204:	: 1,653:	: 1,171:	: 133,824: 62,296
Australia.....	: 90,736:	: 111,628:	: 4,976:	: 3,807:	: 3,472:	: 80,088: 79,899
Russia.....	: 26,656:	: 1,656:	: 216:	: 592:	: 216:	: 1,656: 29,008
Danube and Bulgaria <u>d/</u>	: 15,872:	: 4,104:	: 0:	: 0:	: 24:	: 624: 7,904
British India.....	: c/2,084:	: c/2,318:	: 0:	: 0:	: 0:	: 312: 256
Total <u>e/</u>	: 496,092:	: 474,646:	:	:	:	: 342,832:323,539
Total European ship-	:	:	:	:	:	: f/ :f/
ments <u>a/</u>	: 401,560:	: 387,752:	: 9,576:	:	:	: 262,520:239,840
Total ex-European ship-	:	:	:	:	:	: f/ :f/
ments <u>a/</u>	: 123,352:	: 142,424:	: 3,008:	:	:	: 86,944: 92,008

Division of Statistical and Historical Research. Compiled from official and trade sources. a/ Broomhall's Corn Trade News. b/ Fort William, Port Arthur, Vancouver, Prince Rupert, and New Westminster. c/ Official. d/ Black Sea shipments only. e/ Total of trade figures includes North America as reported by Broomhall. f/ To February 29.

EXCHANGE RATES: Average weekly and monthly values in New York of specified currencies March 14, 1936, with comparisons a/

Country	Monetary unit	Month					Week ended		
		1934	1935	1935	1936		1936		
		Feb.	Feb.	Dec.	Jan.	Feb.	Feb. 29	Mar. 7	Mar. 14
		Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Argentina...	Paper peso...	33.55	32.46	32.85	33.07	33.33	33.27	33.27	33.16
Canada.....	Dollar.....	99.17	99.89	99.05	99.93	100.11	100.07	100.02	99.05
China.....	Shang. yuan	34.31	36.54	29.45	29.66	29.91	29.99	29.79	29.84
Denmark.....	Krone.....	22.47	21.76	22.00	22.15	22.32	22.28	22.28	22.21
England.....	Pound.....	503.26	487.35	492.88	496.27	500.05	499.21	499.01	497.54
France.....	Franc.....	6.46	6.59	6.60	6.63	6.68	6.68	6.67	6.64
Germany.....	Reichsmark..	38.88	40.12	40.22	40.40	40.69	40.64	40.64	40.47
Italy.....	Lira.....	8.58	8.47	8.08	8.03	8.04	8.03	8.02	8.00
Japan.....	Yen.....	29.75	28.39	28.74	28.99	29.13	28.97	29.06	28.97
Mexico.....	Peso.....	27.73	27.75	27.77	27.77	27.77	27.77	27.77	27.77
Netherlands..	Guilder.....	66.04	67.56	67.77	68.17	68.68	68.67	68.53	68.47
Norway.....	Krone.....	25.28	24.49	24.76	24.93	25.12	25.08	25.07	25.00
Spain.....	Peseta.....	13.30	13.66	13.67	13.73	13.84	13.83	13.82	13.76
Sweden.....	Krona.....	25.96	25.13	25.41	25.58	25.78	25.74	25.73	25.65
Switzerland..	Franc.....	31.74	32.25	32.43	32.66	33.03	33.03	33.01	32.87

Federal Reserve Board. a/ Noon buying rates for cable transfers.

LIVESTOCK AND MEAT: Price per 100 pounds in specified European markets, March 11, 1936, with comparisons a/

Market and item	Week ended		
	March 13, 1935	March 4, 1936	March 11, 1936
	Dollars	Dollars	Dollars
Germany:			
Price of hogs, Berlin.....	15.60	17.70	17.70
Price of lard, tcs., Hamburg....	-	12.53	12.40
United Kingdom: <u>b/</u>			
Prices at Liverpool 1st quality			
American green bellies.....	14.35	Nominal	Nominal
Danish Wiltshire sides.....	17.26	20.83	20.22
Canadian green sides.....	14.95	17.71	17.67
American short cut green hams.	18.28	18.85	19.26
American refined lard.....	14.00	12.25	12.44

Liverpool quotations are on the basis of sales from importer to wholesaler.

a/ Converted at current rate of exchange. b/ Week ended Friday.

Index

	Page		
Late cables.....	323	::	LIVESTOCK (HOGS), INDUSTRY, POLAND,
Crop and Market Prospects.....	327	::	1936..... 335
- - - - -		::	Consumption of meat, 1934..... 353
Agricultural and industrial exports,		::	Distribution, 1934..... 342
U.S., July-January 1935-36.....	333	::	Exports, 1929-1935..... 352, 353, 355
Apples:		::	Numbers, 1927, 1929-1935..... 337
Exports, Danube Basin, 1934-1935.	331	::	Slaughter, 1930-1935..... 359
Production, Danube Basin,		::	Meat (pork):
1934, 1935.....	331, 363	::	Exports, U.S.,
Barley:		::	March 14, 1936..... 367
Area:		::	Prices, foreign markets,
Egypt, 1936.....	329, 361	::	March 11, 1936..... 367
U.S., 1936.....	329	::	Oats:
Production, Union of South Africa,		::	Area, U.S., 1936..... 329
1935-36.....	329	::	Production, Union of South Africa,
Stocks, England and Wales,		::	1935-36..... 329
Jan. 1, 1936.....	329	::	Stocks, England and Wales,
Butter:		::	Jan. 1, 1936..... 329
Gradings, New Zealand,		::	Rye, prices, U.S.,
March 6, 1936.....	365	::	March 14, 1936..... 362
Prices, specified markets,		::	Wheat:
March 19, 1936.....	365	::	Area:
Corn, area, U.S., 1936.....	329	::	Egypt, 1931-1936..... 326, 361
Cotton:		::	India, 1931-1936..... 327, 360
Exports, China, January 1936.....	331	::	U.S., 1935, 1936..... 327
Ginnings, Egypt, Feb. 29, 1936...	326	::	Government control, 1935-36..... 334
Imports, China, October-January		::	Growing conditions, China,
1935-36.....	330, 364	::	March 1936..... 326
Prices:		::	Market conditions:
China, March 12, 1936.....	330	::	China, March 13, 1936..... 327
U.K., March 13, 1936.....	363	::	Japan, February 1936..... 328
Stocks, China, Feb. 29, 1936.....	329	::	Prices:
Exchange rates, foreign,		::	Shanghai, March 13, 1936..... 327
March 14, 1936.....	367	::	Specified markets,
Grains:		::	March 14, 1936..... 360
Acreage (feed), specified countries,		::	Tokyo, March 1, 1936..... 328
1933-1936.....	363	::	Production, Union of South Africa,
Exports, March 14, 1936.....	367	::	1934, 1935..... 334
Movement (feed), principal		::	Shipments, principal countries,
countries, March 14, 1936.....	362	::	March 14, 1936..... 367
Prices (feed), principal markets,		::	Wool, sales, U.K.,
March 14, 1936.....	362	::	March 20, 1936..... 326